SUGAR BULLETIN No. 29.

DEPARTMENT OF AGRICULTURE,
BRITISH GUIANA.

TWENTY-NINTH ANNUAL REPORT FOR THE YEAR ENDING THE 31st DECEMBER, 1960.

THE VARIETY AND FERTILIZER POSITION OF THE SUGAR INDUSTRY, XXVI.

REPORT ON THE SUGAR EXPERIMENT STATIONS FOR THE YEAR 1960.

THE "DAILY CHRONICLE," LTD., GEORGETOWN, DEMERARA.
1961.

COMMONWEALTH MYCOLOGICAL
09 OCT 1961

SUGAR BULLETIN No. 29.

DEPARTMENT OF AGRICULTURE,
BRITISH GUIANA.

TWENTY-NINTH ANNUAL REPORT FOR THE YEAR ENDING THE 31st DECEMBER, 1960.

THE VARIETY AND FERTILIZER POSITION OF THE SUGAR INDUSTRY, XXVI.

REPORT ON THE SUGAR EXPERIMENT STATIONS FOR THE YEAR 1960.

THE "DAILY CHRONICLE," LTD., GEORGETOWN, DEMERARA.
1961.

TABLE OF CONTENTS.

	Page
TWENTY-NINTH ANNUAL REPORT FOR THE YEAR ENDING THE 31ST DECEMBER, 1960	1
INTRODUCTION	1
Variety Sorting Trials	3
Plant Cane Variety Trials — Demerara Frontland Clay	14
Berbice Frontland Clay	18
Riverside Clay	19
Pegassy Clay	20
First Ratoon Variety Trials — Demerara Frontland Clay	23
Berbice Frontland Clay	26
Riverside Clay	27
Pegassy Clay	27
Second Ratoon Variety Trials — Demerara Frontland Clay	29
Berbice Frontland Clay	32
Pegassy Clay	32
Variety Performance Summary	34
Varieties produced in 1950	34
Varieties produced in 1951	35
Varieties produced in 1952	36
Varieties produced in 1953	38
Varieties produced in 1954	40
Varieties of Other Countries	42
Position of the Other Series	43
General Summary and Recommendations	44
SEEDLING RAISING AND SELECTION	48
BREEDING	52
HEAT-TREATMENT EFFECTS IN RELATION TO THE FLOWERING OF B.37161	54

TABLE OF CONTENTS—(Contd.).

THE VARIETY AND FERTILIZER POSITION OF THE SUGAR INDUSTRY, XXVI 56

Commercial Yields, 1960 56

Varietal Composition of the 1960 Harvest 57

Acreages under the Various Varieties Scheduled for Reaping in 1961 58

The Changing Variety Pattern 58

Cycle Age of the Crops 58

Fertilizers 61

REPORT ON THE SUGAR EXPERIMENT STATIONS FOR THE YEAR 1960 63

Committee 63

Research Sub-Committee 64

Staff 64

Experiments 66

Finance 66

Acknowledgements 66

APPENDIX I 67

Details of Potting and Planting of Seedlings of The Demerara 1959 Series 67

APPENDIX II 69

Details of Potting and Planting of Seedlings of The Demerara/Barbados 1959 Series 69

APPENDIX III 73

Details of the Selection of The Demerara–Barbados 1958 Series 73

BRITISH GUIANA SUGAR EXPERIMENT STATION.

TWENTY-NINTH ANNUAL REPORT FOR THE YEAR ENDING THE 31ST DECEMBER, 1960.

INTRODUCTION

The year 1960 proved to be a satisfactory one for the growth of sugar cane with adequate rainfall, well distributed throughout the year.

The rainfall at the Sugar Experiment Station during 1960 was 94.62 inches being 6.65 inches below the average over the period 1921—1959.

The first three months of the year were somewhat drier than usual and the highest rainfall occurred in May and June while during December also less rain fell than usual.

A comparison of the monthly rainfall at the Sugar Experiment Station for 1960 with the average over the period 1921—1959 is given in the table below.

Comparison of the Monthly Rainfall at Sophia Experiment Station for 1960 with the average for 1921—1959.

Month.	Actual Rainfall 1960. Inches.	Average Rainfall 1921—1959. Inches.	Excess or Deficit. Inches.
January	7.80	10.13	—2.33
February	1.80	4.82	—3.02
March	1.98	4.76	—2.78
April	6.86	7.05	—0.19
May	16.19	12.51	3.68
June	16.39	15.00	1.39
July	11.29	11.58	—0.29
August	10.19	8.04	2.15
September	0.92	3.27	—2.35
October	3.16	3.92	—0.76
November	7.34	6.34	1.00
December	10.70	13.85	—3.15
Total	**94.62**	**101.27**	**—6.65**

Fair progress was made with the testing of new varieties and twenty-eight variety experiments were planted during the year. Seventy-five variety experiments were reaped in 1960.

Germination of "fuzz" imported from the B.W.I. Central Sugar Cane Breeding Station, Barbados was good and 35,826 seedlings constituting the Demerara/Barbados 1959 series were planted in the nursery. 13,189 seedlings resulting from crosses made at Sophia during 1959 and constituting the Demerara 1959 series were also planted in the nursery during 1960.

New methods of selection from the Demerara and Demerara/Barbados material were attempted during the year and are reported on elsewhere in this report.

One small experiment was laid down to assess the value of the bunch planting of sugar cane seedlings under British Guiana conditions. It is obvious that the quantity of nursery material being planted at the Sugar Experiment Station each year is increasing and shortage of planting space is becoming an important consideration. Bunch planting, if found to be an efficient means of selection under British Guiana conditions, would be one very useful means of conserving space.

One experiment was laid down to investigate whether the clonal material from heat treated stock of B.37161 in Barbados is more profuse in its flowering than non-heat treated British Guiana material.

Seventy-eight crosses were attempted at the Sugar Experiment Station during the 1960 breeding season. Flowering was very heavy and early indications are that germination of the resulting "fuzz" is good.

During the early part of November the Sugar Agronomist visited the B.W.I. Central Sugar Cane Breeding Station, Barbados to observe the work in progress there and to hold discussions with the members of the Staff of that Department. The Sugar Agronomist also attended the Meeting of the B.W.I. Sugar Technologists' Association in Montego Bay, Jamaica from November 14th to 18th, 1960.

Early in March, Mr. D. I. T. Walker, Geneticist of the B.W.I. Central Sugar Cane Breeding Station, Barbados visited the Station to assist in the selection of the D.B. 1958 series and to discuss changes in the methods of selection in use at the Station.

The Station was visited by a party of Students from the Imperial College of Tropical Agriculture, Trinidad under Professor C. C. Webster late in March.

Among the many visitors both from abroad and from the local sugar industry who visited the Station during 1960 were Dr. A. J. Vlitos from Trinidad, Mr. R. F. Innes from Jamaica, Mr. L. Auger from Martinique and Mr. P. Douchez from Guadeloupe.

VARIETY TRIALS, 1960.

BY

W. N. L. DAVIES, *Sugar Agronomist.*

AND

C. CAMERON, *Field Manager.*

The results of the 1960 series of Variety Trials are presented under the following captions :—

Variety Sorting Trials.

Plant Cane Variety Trials.

First Ratoon Variety Trials.

Second Ratoon Variety Trials.

Variety Performance Summary.

General Summary and Recommendations.

VARIETY TRIALS, 1950.

TABLE I.—**Results of Plant Cane "Variety Sorting" Trials on Demerara Frontland Clay.**

	Variety.	Cane per Acre, Tons.	Pol. % Cane.	Purity.	Sucrose in Cane per Acre.		Trial No.
					Tons.	% Mean.	
	Sophia, Field 4 East "B." Reaped 25.2.60 at 12.50 months. Rainfall:—93.44 inches.						
MEANS OF 4 PLOTS :	***B. 41227**	**56.72**	**13.89**	**88.4**	**7.88**	**121.79**	239
	D.B. 136/56	54.61	14.25	87.1	7.78	120.25	
	D.B. 38/56	52.02	14.44	89.4	7.51	116.07	
	D.B. 161/56	51.09	14.67	87.0	7.50	115.92	
	D.B. 188/56	56.38	13.10	85.1	7.39	114.22	
	D.B. 72/56	54.61	13.44	87.2	7.34	113.45	
	D.B. 7/56	63.55	11.35	80.7	7.21	111.44	
	D.B. 119/56	49.29	14.29	86.3	7.04	108.81	
	D.B. 166/56	52.40	13.22	87.2	6.93	107.11	
	D.B. 58/56	56.25	12.26	85.2	6.90	106.65	
	D.B. 134/56	49.36	13.80	80.7	6.81	105.25	
	D.B. 169/56	53.59	12.70	82.8	6.80	105.10	
	D.B. 100/56	47.68	14.02	85.3	6.68	103.25	
	D.B. 63/56	53.63	12.08	85.9	6.48	100.15	
	D.B. 137/56	57.34	11.31	80.8	6.48	100.15	
	D.B. 44/56	50.53	12.78	86.2	6.46	99.85	
	D.B. 2/56	44.50	14.14	87.6	6.29	97.22	
	D.B. 167/56	48.36	12.96	85.4	6.27	96.91	
	D.B. 23/56	57.70	10.83	83.5	6.25	96.60	
	D.B. 77/56	43.96	14.01	87.7	6.16	95.21	
	D.B. 159/56	47.52	12.86	82.9	6.11	94.44	
	D.B. 104/56	55.36	10.98	81.2	6.08	93.97	
	D.B. 180/56	54.46	10.68	79.6	5.82	89.95	
	D.B. 172/56	42.81	13.21	85.0	5.65	87.33	
	D.B. 132/56	44.28	12.71	84.7	5.63	87.02	
	D.B. 128/56	46.07	12.21	81.0	5.63	87.02	
	D.B. 25/56	43.77	12.22	85.0	5.35	82.69	
	D.B. 67/56	49.09	10.90	83.7	5.35	82.69	
	D.B. 181/56	46.85	11.21	82.8	5.25	81.14	
	D.B. 160/56	42.49	11.75	83.2	4.99	77.13	
	Mean :				6.47	100.00	
	Significant Difference, 20 : 1 :				.96	14.84	

***Standard Cane.**

TABLE I. (Contd.) —**Results of Plant Cane "Variety Sorting" Trials on Demerara Frontland Clay.**

	Variety.	Cane per Acre, Tons	Pol. % Cane.	Purity	Sucrose in Cane per Acre.		Trial No.
					Tons.	% Mean.	
Sophia, Field 4 East "A". Reaped 11.3.60 at 12.75 months. Rainfall:—94.71 inches.							
MEANS OF 4 PLOTS :	***B. 41227**	**59.84**	**15.22**	**89.6**	**9.10**	**130.19**	240
	B. 55362	57.14	13.58	86.5	7.76	111.02	
	B. 55309	55.04	14.03	84.7	7.72	110.44	
	B. 5599	65.85	11.55	79.2	7.60	108.73	
	D. 7/56	58.34	12.87	84.8	7.51	107.44	
	B. 55132	57.93	12.90	84.0	7.47	106.87	
	B. 55258	74.00	9.71	77.2	7.18	102.72	
	B. 55304	51.08	13.88	90.1	7.09	101.43	
	D. 19/56	54.34	13.04	84.1	7.08	101.29	
	B. 55250	60.07	11.71	82.3	7.03	100.57	
	B. 5579	48.74	14.42	88.6	7.03	100.57	
	B. 55244	63.37	10.97	76.8	6.99	100.00	
	B. 5503	58.49	11.78	83.5	6.89	98.57	
	B. 55137	56.84	12.05	83.0	6.85	98.00	
	B. 55317	58.43	11.63	78.9	6.79	97.14	
	B. 55111	54.20	11.63	83.1	6.30	90.13	
	B. 5557	56.69	10.90	81.2	6.18	88.41	
	D. 12/56	53.90	11.25	81.8	6.06	86.70	
	B. 5527	50.65	11.72	83.1	5.94	84.98	
	B. 55109	48.36	10.76	79.8	5.20	74.39	
	Mean :				6.99	100.00	
	Significant Difference, 20 : 1 :				1.33	19.03	
Sophia, Field 4 East "C". Reaped 9.3.60 at 12.00 months. Rainfall:—92.72 inches.							
MEANS OF 4 PLOTS :	***B. 41227**	**57.44**	**14.69**	**89.0**	**8.44**	**121.97**	241
	B. 5703	57.89	14.19	89.2	8.21	118.64	
	B. 57138	50.59	14.63	87.5	7.40	106.94	
	B. 5749	55.00	13.04	85.9	7.17	103.61	
	B. 5759	51.97	13.19	85.8	6.85	98.99	
	B. 57125	50.90	13.23	88.3	6.73	97.25	
	B. 57166	56.15	11.97	81.8	6.72	97.11	
	B. 57145	50.78	13.10	85.5	6.65	96.10	
	B. 5747	51.73	11.05	81.3	5.72	82.66	
	B. 57104	54.49	9.80	77.1	5.34	77.17	
	Mean :				6.92	100.00	
	Significant Difference, 20 : 1 :				.99	14.31	

***Standard Cane.**

TABLE I. (Contd.) —Results of Plant Cane "Variety Sorting" Trials on Demerara Frontland Clay.

	Variety.	Cane per Acre, Tons.	Pol. % Cane.	Purity.	Sucrose in Cane per Acre. Tons.	Sucrose in Cane per Acre. % Mean.	Trial No.
Sophia, Field 9 East "B". Reaped 20.10.60 at 12.75 months. Rainfall:—100.61 inches.							
MEANS OF 5 PLOTS :	B. 5788	39.77	16.18	89.2	6.43	140.09	242
	B. 5779	41.02	15.38	88.3	6.31	137.47	
	B. 5785	43.61	14.04	85.8	6.12	133.33	
	B. 5736	35.29	16.36	87.6	5.78	125.93	
	***B. 41227**	**39.00**	**14.27**	**87.6**	**5.56**	**121.13**	
	B. 5706	38.99	13.96	88.0	5.44	118.52	
	B. 57109	43.54	12.29	85.4	5.35	116.56	
	B. 5725	41.35	11.84	84.0	4.89	106.54	
	B. 5795	35.02	13.76	88.1	4.82	105.01	
	B. 5796	32.30	14.55	87.2	4.70	102.40	
	B. 5772	40.36	11.56	83.2	4.66	101.52	
	B. 5717	32.45	14.25	89.0	4.62	100.65	
	B. 5724	32.87	13.81	86.4	4.54	98.91	
	B. 57124	29.21	14.59	86.6	4.26	92.81	
	B. 57152	27.65	13.57	86.6	3.75	81.70	
	B. 57118	26.58	13.88	88.8	3.69	80.39	
	B. 5762	27.05	13.09	85.0	3.54	77.12	
	B. 57173	27.52	12.65	84.9	3.48	75.82	
	B. 57142	24.76	13.42	84.9	3.32	72.33	
	B. 57165	23.91	13.04	84.7	3.12	67.97	
	B. 57135	18.44	11.02	81.4	2.03	44.23	
	Mean :				4.59	100.00	
	Significant Difference, 20: 1:				.79	17.21	
Sophia, Field 9 East "A". Reaped 25.10.60 at 12.75 months. Rainfall:—100.61 inches.							
MEANS OF 5 PLOTS :	B. 5780	45.02	14.95	87.7	6.73	156.51	243
	B. 5784	40.44	14.35	86.2	5.80	134.88	
	B. 57162	44.90	12.77	87.9	5.73	133.26	
	B. 5733	36.51	15.07	90.7	5.50	127.91	
	B. 5782	37.15	13.86	86.3	5.15	119.77	
	***B. 41227**	**36.42**	**13.98**	**88.5**	**5.09**	**118.37**	
	B. 5748	33.86	14.56	87.5	4.93	114.65	
	B. 5707	34.94	12.79	86.3	4.47	103.95	
	B. 5712	30.41	14.40	87.7	4.38	101.86	
	B. 57120	26.46	15.35	89.2	4.06	94.42	
	B. 5789	30.53	13.19	86.5	4.03	93.72	
	B. 57168	28.52	14.02	88.0	4.00	93.02	
	B. 57116	26.17	14.62	87.8	3.83	89.07	
	B. 5743	28.22	13.01	88.6	3.67	85.35	
	B. 57143	25.68	14.18	87.9	3.64	84.65	
	B. 57175	24.07	14.90	89.1	3.59	83.49	
	B. 5770	28.73	12.44	81.9	3.57	83.02	
	B. 57139	24.58	14.33	88.3	3.52	81.86	
	B. 57134	27.08	11.86	86.3	3.21	74.65	
	B. 57131	22.00	13.67	86.8	3.01	70.00	
	B. 57115	16.51	14.79	86.2	2.44	56.74	
	Mean :				4.30	100.00	
	Significant Difference, 20 : 1 :				1.04	24.19	

***Standard Cane.**

TABLE I.—(Contd.)—Results of First Ratoon "Variety Sorting" Trials on Demerara Frontland Clay.

	Variety.	Cane per Acre, Tons.	Pol. % Cane.	Purity.	Sucrose in Cane per Acre, Tons.	Sucrose in Cane per Acre, % Mean.	Combined results for 2 Crops, Plants and 1st Ratoons. Variety.	Combined results for 2 Crops, Plants and 1st Ratoons. Sucrose in Cane per Acre. Tons.	Trial No.
	Sophia, 16 East "B". Reaped 2.4.60 at 11.50 months. Rainfall:—92.65 inches.								
MEANS OF 4 PLOTS:	***B. 41227**	**28.03**	**15.40**	**89.2**	**4.32**	**164.26**	***B. 41227**	**11.15**	218
	D. 248/55	34.19	12.25	82.9	4.19	159.32	D. 245/55	10.77	
	D. 254/55	30.35	12.46	86.2	3.78	143.73	D. 248/55	10.71	
	D. 242/55	26.42	13.94	87.6	3.68	139.92	D. 239/55	9.68	
	D. 239/55	24.11	13.67	85.3	3.29	125.09	D. 50/54	9.67	
	D.B. 101/55	24.65	13.10	84.4	3.23	122.81	D. 249/55	9.15	
	D.B. 13/55	26.52	11.78	84.8	3.13	119.81	D. 202/55	8.91	
	D. 50/54	23.74	12.20	84.0	2.89	109.89	D.B. 13/55	8.84	
	D. 249/55	21.28	13.26	85.9	2.82	107.22	D. 278/55	8.77	
	D. 207/55	19.16	13.39	85.5	2.57	97.72	D. 242/55	8.75	
	D. 214/55	17.37	14.79	89.4	2.56	97.34	D. 214/55	8.70	
	D. 202/55	21.67	11.77	82.1	2.55	96.96	D. 238/55	8.64	
	D. 240/55	18.10	13.96	87.8	2.53	96.20	D. 207/55	8.54	
	D. 238/55	21.27	11.52	84.3	2.45	93.16	D.B. 101/55	8.49	
	D. 267/55	18.97	12.79	86.9	2.42	92.02	D. 240/55	8.36	
	D. 278/55	16.75	14.09	87.7	2.36	89.73	D. 267/55	8.15	
	D. 195/55	17.31	13.25	87.1	2.29	87.07	D. 201/55	8.06	
	D. 246/55	24.36	9.27	75.8	2.26	85.93	D. 255/55	7.99	
	D. 255/55	18.76	11.06	80.7	2.07	78.71	D. 219/55	7.83	
	D. 253/55	16.31	11.42	83.0	1.86	70.72	D. 236/55	7.70	
	D. 219/55	14.11	12.98	84.3	1.83	69.58	D. 180/55	7.60	
	D. 180/55	12.60	14.10	87.5	1.78	67.68	D. 246/55	7.46	
	D. 203/55	14.40	11.93	83.2	1.72	65.40	D. 195/55	7.32	
	D. 236/55	15.85	10.31	80.7	1.63	61.98	D. 203/55	6.99	
	D. 201/55	14.01	10.54	76.4	1.47	55.89	D. 253/55	6.87	
	Mean :				2.63	100.00			
	Significant Difference, 20: 1:				.87	33.08			
	Sophia, Field 16 West "A". Reaped 5.4.60 at 12.25 months. Rainfall:—93.30 inches.								
MEANS OF 4 PLOTS:	D.B. 6/55	36.04	14.25	88.4	5.14	138.54	D.B. 6/55	11.78	215
	D.B. 9/55	34.01	13.55	88.1	4.61	124.26	D.B. 9/55	10.86	
	D.B. 8/55	34.39	13.13	85.1	4.51	121.56	D.B. 5/55	10.72	
	D.B. 44/55	31.66	14.15	87.1	4.48	120.75	D.B. 10/55	10.71	
	D.B. 20/55	32.85	13.52	86.2	4.44	119.68	***B. 41227**	**10.67**	
	D.B. 5/55	32.28	13.15	86.5	4.24	114.29	D.B. 8/55	9.91	
	D.B. 10/55	33.31	12.72	86.4	4.24	114.29	D.B. 57/55	9.89	
	D.B. 57/55	27.86	14.89	87.8	4.15	111.86	D.B. 44/55	9.71	
	B. 52315	29.49	13.76	85.2	4.06	109.43	D.B. 20/55	9.24	
	***B. 41227**	**33.48**	**11.23**	**81.8**	**3.76**	**101.35**	B. 52315	8.81	
	D.B. 59/55	27.09	13.48	86.8	3.65	98.38	D.B. 59/55	8.76	
	D.B. 7/55	27.07	11.57	81.6	3.13	84.37	D.B. 7/55	8.74	
	D.B. 24/55	30.58	9.20	75.7	2.81	75.74	D.B. 13/55	7.85	
	D.B. 13/55	25.69	10.73	79.9	2.75	74.12	N.Co. 300	7.28	
	N.Co. 300	23.66	11.53	82.4	2.73	73.58	D.B. 4/55	7.08	
	D.B. 4/55	26.67	8.93	70.1	2.38	64.15	D.B. 24/55	7.08	
	D.B. 1/55	17.24	11.94	82.0	2.06	55.53	D.B. 1/55	6.74	
	Mean :				3.71	100.00			
	Significant Difference, 20: 1:				.99	26.68			

***Standard Cane.**

TABLE I. (Contd.) —Results of First Ratoon "Variety Sorting" Trials on Demerara Frontland Clay.

	Variety.	Cane per Acre, Tons.	Pol. % Cane.	Purity.	Sucrose in Cane per Acre. Tons.	Sucrose in Cane per Acre. % Mean.	Combined results for 2 Crops, Plants, and 1st Ratoons. Variety.	Combined results for 2 Crops, Plants, and 1st Ratoons. Sucrose in Cane per Acre, Tons.	Trial No.
	Sophia, Field 10 West "B". Reaped 21.4.60 at 12.25 months.								
	Rainfall :— 98.39 inches.								
MEANS OF 5 PLOTS.	B. 5490	48.42	14.28	87.7	6.91	124.06	B. 5411	13.88	213
	B. 5411	46.33	14.05	86.8	6.51	116.88	***B. 41227**	**13.51**	
	B. 54281	47.00	13.80	88.2	6.48	116.34	B. 5490	13.49	
	B. 54163	41.97	14.54	88.1	6.10	109.52	B. 54277	13.37	
	***B. 41227**	**46.31**	**12.98**	**85.0**	**6.01**	**107.90**	B. 54281	13.07	
	B. 5480	40.63	14.69	89.5	5.97	107.18	B. 54163	12.33	
	B. 54243	40.17	14.69	88.9	5.90	105.92	B. 54262	12.01	
	B. 54142	42.03	14.02	87.0	5.89	105.75	B. 54142	11.96	
	B. 5463	44.26	13.12	84.7	5.81	104.31	B. 54243	11.74	
	B. 54262	40.87	14.01	87.2	5.73	102.87	B. 5480	11.72	
	B. 54277	47.23	11.78	82.6	5.56	99.82	B. 5463	11.50	
	B. 54215	39.16	13.62	86.4	5.33	95.69	B. 54172	10.61	
	B. 54172	33.94	15.14	89.0	5.14	92.28	B. 54215	10.28	
	B. 54237	32.21	14.38	87.6	4.63	83.12	B. 5401	9.92	
	B. 5401	36.55	12.56	83.9	4.59	82.41	B. 54237	9.21	
	B. 54235	34.14	12.85	87.2	4.39	78.81	B. 54253	9.13	
	B. 54193	30.35	12.56	82.9	3.81	68.40	B. 54193	8.05	
	Mean :				5.57	100.00			
	Significant Difference, 20 : 1 :				1.07	19.21			
	Sophia, Field 10 West "A". Reaped 24.4.60 at 12.25 months.								
	Rainfall:—99.06 inches.								
MEANS OF 5 PLOTS.	***B. 41227**	**50.20**	**14.02**	**87.1**	**7.04**	**145.45**	***B. 41227**	**14.98**	217
	B. 54253	47.31	14.14	87.9	6.69	138.22	B. 54253	13.25	
	D.B. 162/55	39.69	13.89	87.2	5.51	113.84	D.B. 162/55	12.90	
	D.B. 33/55	42.30	13.00	85.5	5.50	113.64	D.B. 33/55	12.61	
	D.B. 49/55	42.27	12.66	84.4	5.35	110.54	D.B. 49/55	11.87	
	D.B. 137/55	41.50	12.83	86.5	5.33	110.12	D.B. 101/55	11.64	
	D.B. 90/55	37.76	13.46	85.8	5.08	104.96	D.B. 154/55	11.51	
	D.B. 101/55	43.67	11.21	82.1	4.90	101.24	D.B. 137/55	11.13	
	D.B. 154/55	43.78	11.12	83.2	4.87	100.62	D.B. 139/55	10.88	
	D.B. 151/55	35.45	12.72	85.9	4.51	93.18	D.B. 90/55	10.86	
	D.B. 139/55	35.97	12.29	84.8	4.42	91.32	B. 5449	9.94	
	D.B. 99/55	36.56	11.87	82.1	4.34	89.67	D.B. 71/55	8.92	
	B. 5449	30.21	13.83	86.9	4.18	86.36	D.B. 151/55	8.83	
	D.B. 71/55	32.70	12.67	84.3	4.14	85.54	D.B. 99/55	8.76	
	D.B. 124/55	33.28	11.68	82.5	3.89	80.37	D.B. 123/55	8.75	
	D.B. 68/55	25.20	13.51	87.1	3.40	70.25	D.B. 124/55	8.75	
	D.B. 123/55	34.43	9.30	77.7	3.20	66.12	D.B. 68/55	7.65	
	Mean :				4.84	100.00			
	Significant Difference, 20 : 1 :				1.02	21.07			

*** Standard Cane.**

TABLE 1. (Contd.)—Results of a First Ratoon "Variety Sorting" Trial on Demerara Frontland Clay.

	Variety.	Cane per Acre, Tons.	Pol. % Cane.	Purity.	Sucrose in Cane per Acre. Tons.	Sucrose in Cane per Acre. % Mean.	Combined results for 2 Crops, Plants and 1st Ratoons. Variety.	Combined results for 2 Crops, Plants and 1st Ratoons. Sucrose in Cane per Acre, Tons.	Trial No.
	Sophia, Field 6 West "B". Reaped 4.5.60 at 12.50 months. Rainfall:—95.19 inches.								
MEANS OF 5 PLOTS:	D. 26/52	45.45	15.68	90.1	7.13	152.35	D. 26/52	15.83	216
	D. 44/52	42.55	14.65	87.5	6.23	133.12	*B. 41227	14.06	
	*B. 41227	44.20	13.21	87.8	5.84	124.79	D. 44/52	13.04	
	D.B. 167/55	39.23	12.49	86.0	4.90	104.70	D.B. 170/55	11.88	
	D.B. 170/55	40.41	12.02	81.9	4.86	103.85	D.B. 167/55	11.39	
	D. 45/52	39.19	12.35	85.6	4.84	103.42	D. 45/52	11.33	
	D.B. 13/55	38.03	10.59	81.8	4.03	86.11	D.B. 166/55	10.95	
	D.B. 85/55	31.79	12.10	83.0	3.85	82.26	D.B. 154/55	10.93	
	D.B. 154/55	37.62	10.18	80.1	3.83	81.84	D.B. 13/55	10.47	
	D.B. 166/55	29.81	12.14	84.3	3.62	77.35	D.B. 85/55	9.85	
	D.B. 89/55	29.41	12.01	84.7	3.53	75.43	D.B. 84/55	9.82	
	D.B. 84/55	30.45	11.42	79.8	3.48	74.36	D.B. 89/55	9.18	
	Mean:				4.68	100.00			
	Significant Difference, 20: 1:				.77	16.45			

*Standard Cane.

TABLE I. (Contd.)—**Results of Second Ratoon "Variety Sorting" Trials on Demerara Frontland Clay.**

	Variety.	Cane. per Acre, Tons.	Pol. % Cane.	Purity.	Sucrose in Cane per Acre.		Combined results for 3 Crops, Plants, 1st and 2nd Ratoons.		Trial No.
					Tons.	% Mean.	Variety.	Sucrose in Cane per Acre. Tons.	
	Sophia, Field 2 West "A". Reaped 22.3.60 at 11.75 months. Rainfall:—92.60 inches.								
MEANS OF 4 PLOTS:	***B. 41227**	**39.73**	**13.14**	**85.2**	**5.22**	**125.78**	***B. 41227**	**18.30**	191
	B. 53218	33.72	13.42	84.1	4.52	108.92	B. 53267	15.03	
	B. 53267	31.42	14.07	87.8	4.42	106.51	B. 53261	15.12	
	B. 53362	33.65	12.21	82.2	4.11	99.04	B. 53218	14.75	
	B. 53261	31.32	12.32	81.9	3.86	93.01	B. 53165	13.92	
	B. 53165	31.51	11.75	79.3	3.70	89.16	B. 53362	13.75	
	B. 53317	21.11	15.41	88.5	3.25	78.31	B. 53317	11.10	
	Mean :				4.15	100.00			
	Significant Difference, 20: 1:				.53	12.77			
	Sophia, Field 2 West "B". Reaped 24.3.60 at 11.75 months. Rainfall:—92.62 inches.								
MEANS OF 5 PLOTS:	***B. 41227**	**37.19**	**14.55**	**87.7**	**5.41**	**129.12**	B. 53227	19.22	192
	B. 53227	37.08	13.60	88.5	5.04	120.29	***B. 41227**	**19.05**	
	B. 53200	36.30	12.74	85.0	4.63	110.50	B. 53200	17.61	
	B. 53329	34.64	13.03	86.1	4.51	107.64	B. 53329	15.99	
	B. 5321	33.32	11.77	84.6	3.92	93.56	B. 5321	15.92	
	B. 53320	32.67	11.49	81.0	3.75	89.50	B. 5398	15.39	
	B. 5398	29.41	12.17	84.2	3.58	85.44	B. 53122	14.40	
	B. 5352	32.85	10.69	79.6	3.51	83.77	B. 5352	14.35	
	B. 53122	29.08	11.26	81.5	3.37	80.43	B. 53320	13.84	
	Mean:				4.19	100.00			
	Significant Difference, 20: 1:				.66	15.75			

tandard Cane.

TABLE I. (Contd.)—**Results of Second Ratoon "Variety Sorting" Trials on Demerara Frontland Cl**

	Variety.	Cane per Acre, Tons.	Pol. % Cane.	Purity.	Sucrose in Cane per Acre. Tons.	Sucrose in Cane per Acre. % Mean.	Combined results for 3 Crops, Plants, 1st and 2nd Ratoons. Variety.	Sucrose in Cane per Acre. Tons.	Tri N
	Sophia, Field 9 West "B". Reaped 4.8.60 at 11.25 months. Rainfall:—93.47 inches.								
MEANS OF 5 PLOTS:	D. 53/54	46.48	12.77	87.5	5.94	127.47	*B. 41227	19.19	
	*B. 41227	40.19	14.59	90.1	5.87	125.97	D.B. 9/54	19.00	
	D. 50/54	40.57	13.06	86.9	5.30	113.73	D. 50/54	18.19	
	D.B. 9/54	39.92	12.64	87.5	5.05	108.37	D. 53/54	18.02	
	D.B. 18/54	37.08	12.87	86.4	4.77	102.36	D.B. 18/54	16.08	
	D. 47/54	32.50	13.48	89.0	4.38	93.99	D.B. 21/54	15.32	
	D.B. 21/54	34.23	12.75	85.8	4.36	93.56	D. 47/54	14.67	1
	D.B. 70/54	32.84	12.89	86.6	4.23	90.77	D.B. 70/54	14.05	
	D.B. 82/54	31.36	12.73	86.6	3.99	85.62	D.B. 71/54	13.82	
	D.B. 75/54	30.82	12.13	85.8	3.74	80.26	D.B. 82/54	13.13	
	D.B. 71/54	31.19	11.55	84.6	3.60	77.25	D.B. 75/54	12.85	
	Mean :				4.66	100.00			
	Significant Difference, 20 : 1 :				.49	10.51			
	Sophia, Field 9 West "A". Reaped 6.8.60 at 11.25 months. Rainfall:—93.59 inches.								
MEANS OF 5 PLOTS:	*B. 41227	40.34	14.57	89.7	5.88	131.25	*B. 41227	19.57	
	D.B. 68/54	34.59	15.51	90.4	5.36	119.64	D.B. 131/54	18.62	
	D.B. 197/54	38.38	13.95	87.9	5.36	119.64	D.B. 197/54	18.39	
	D.B. 163/54	36.74	14.45	89.8	5.31	118.53	D.B. 68/54	18.23	
	D.B. 131/54	38.40	13.19	86.2	5.07	113.17	D.B. 163/54	17.19	1
	D. 51/54	41.61	11.17	83.7	4.65	103.79	D. 51/54	16.83	
	D.B. 1/54	34.41	13.04	87.1	4.49	100.22	D.B. 2/54	16.10	
	D.B. 2/54	31.06	13.60	85.4	4.22	94.20	D.B. 1/54	15.18	
	D.B. 172/54	27.24	12.59	89.1	3.43	76.56	D.B. 172/54	15.11	
	D.B. 156/54	27.33	12.38	86.9	3.38	75.45	D.B. 156/54	13.21	
	D.B. 154/54	17.98	11.69	82.4	2.10	46.87	D.B. 154/54	10.23	
	Mean :				4.48	100.00			
	Significant Difference, 20 : 1 :				.54	12.05			

* **Standard Cane.**

TABLE I. (Contd.)—Results of Second Ratoon "Variety Sorting" Trials on Demerara Frontland Clay.

	Variety.	Cane per Acre, Tons.	Pol. % Cane.	Purity.	Sucrose in Cane per Acre,		Combined Results for 3 Crops, Plants, 1st and 2nd Ratoons		Trial No.
					Tons.	% Mean.	Variety.	Sucrose in Cane per Acre. Tons.	
	Sophia, Field 12 East "A". Reaped 11.8.60 at 11.50 months.								
	Rainfall:—95.34 inches.								
MEANS OF 5 PLOTS:	D.B. 125/54	40.17	14.64	89.6	5.88	131.84	D.B. 125/54	20.65	193
	D.B. 81/54	41.50	13.02	86.8	5.41	121.30	D.B. 81/54	17.84	
	D.B. 7/54	40.52	13.15	87.4	5.33	119.51	***B. 41227**	**17.80**	
	***B. 41227**	**39.38**	**13.49**	**87.7**	**5.31**	**119.06**	D.B. 7/54	17.70	
	D.B. 23/54	37.94	13.21	87.8	5.01	112.33	D.B. 80/54	17.44	
	D.B. 76/54	35.98	13.72	87.7	4.94	110.76	D.B. 77/54	16.85	
	D.B. 80/54	37.82	13.07	87.5	4.94	110.76	D.B. 13/54	16.75	
	D.B. 77/54	37.24	13.13	87.2	4.91	110.09	D.B. 76/54	16.48	
	D.B. 83/54	36.35	13.12	85.1	4.77	106.95	D.B. 23/54	16.37	
	D.B. 13/54	34.60	13.56	89.3	4.69	105.16	D.B. 6/54	15.78	
	D. 49/54	38.41	11.70	84.2	4.49	100.67	D. 49/54	15.69	
	D.B. 40/54	31.72	13.62	87.9	4.32	96.86	D.B. 83/54	15.21	
	D.B. 94/54	33.92	12.43	83.6	4.22	94.62	D.B. 88/54	15.12	
	D.B. 6/54	36.30	11.31	85.6	4.11	92.15	D.B. 12/54	15.01	
	D.B. 12/54	34.64	11.85	86.9	4.10	91.93	D.B. 65/54	14.83	
	D.B. 88/54	34.49	11.79	85.0	4.07	91.26	D.B. 94/54	14.33	
	D.B. 29/54	29.15	13.74	87.4	4.01	89.91	D.B. 61/54	14.14	
	D.B. 65/54	33.92	11.78	84.0	3.99	89.46	D.B. 29/54	13.68	
	D.B. 61/54	30.40	12.12	81.6	3.68	82.51	D.B. 40/54	12.98	
	D.B. 32/54	23.08	12.66	85.6	2.92	65.47	D.B. 32/54	10.43	
	D.B. 35/54	21.00	12.50	85.7	2.62	58.74	D.B. 35/54	10.20	
	Mean:				4.46	100.00			
	Significant Difference, 20: 1:				.84	18.83			

* Standard Cane.

TABLE I (Contd.)—Results of a First Ratoon "Variety Sorting" Trial on Pegassy Clay.

	Variety.	Cane per Acre, Tons.	Pol. % Cane.	Purity.	Sucrose in Cane per Acre.		Combined results for 2 Crops, Plants and 1st Ratoons.		Tri No
					Tons.	% Mean.	Variety.	Sucrose in Cane per Acre, Tons.	
	Pln. De Kinderen, Field 74 W. Reaped 8.9.60 at 12.25 months.								
	Rainfall:—99.40 inches.								
	B. 54262	48.93	12.82	85.0	6.27	140.58	B. 54142	9.89	
	B. 54253	44.99	13.84	85.5	6.23	139.69	B. 54262	9.74	
	B. 54277	41.18	13.61	83.8	5.60	125.56	B. 54253	9.62	
	B. 54142	42.92	12.97	80.8	5.57	124.89	B. 54277	8.95	
	B. 5490	42.66	12.75	84.4	5.44	121.97	B. 5490	8.94	
	B. 54163	40.89	12.69	83.7	5.18	116.14	B. 54163	8.89	
	B. 5449	38.08	12.39	83.4	4.71	105.61	B. 54172	8.06	
	B. 54172	33.63	13.24	85.4	4.45	99.78	B. 5463	7.44	
MEANS OF 4 PLOTS:	***B. 41227**	**37.22**	**11.13**	**78.6**	**4.14**	**92.83**	***B. 41227**	**7.34**	21
	B. 5401	35.04	11.79	82.1	4.13	92.60	B. 5449	7.23	
	B. 54243	38.99	10.31	73.3	4.02	90.13	B. 54243	7.07	
	B. 54281	36.42	10.99	81.5	4.00	89.69	B. 5480	6.91	
	B. 5463	33.41	11.69	80.8	3.90	87.44	B. 5401	6.78	
	B. 5480	32.77	11.87	81.7	3.89	87.22	B. 5411	5.80	
	B. 5411	39.01	9.89	78.8	3.86	86.55	B. 54281	5.72	
	B. 54215	33.21	9.80	77.5	3.25	72.87	B. 54215	4.72	
	B. 54235	23.88	11.80	82.5	2.82	63.23	B. 54235	4.35	
	B. 54193	30.01	9.33	73.6	2.80	62.78	B. 54193	4.07	
	Mean:				4.46	100.00			
	Significant Difference, 20: 1:				.74	16.59			

* **Standard Cane.**

ABLE I. (Contd.)—**Results of Second Ratoon "Variety Sorting" Trials on Pegassy Clay.**

	Variety.	Cane per Acre, Tons.	Pol. % Cane.	Purity.	Sucrose in Cane per Acre.		Combined results for 3 Crops, Plants, 1st and 2nd Ratoons.		Trial No.
					Tons.	% Mean.	Variety.	Sucrose in Cane per Acre. Tons.	
	Pln. Uitvlugt, Field 39 I.C.B.U. East. Reaped 10.3.60 at 11.75 months.								
	Rainfall:—91.68 inches.								
	***B. 41227**	**47.03**	**14.03**	**87.2**	**6.60**	**126.44**	D. 141/46	18.06	
	D. 141/46	45.40	14.47	88.5	6.57	125.86	B. 52315	18.00	
	B. 52315	44.17	13.75	86.3	6.07	116.28	***B. 41227**	**17.81**	
	B. 52107	39.01	14.42	88.3	5.62	107.66	B. 52321	16.13	
	B. 52321	36.81	15.17	90.9	5.58	106.90	B. 52107	15.22	
	B. 5213	40.15	13.70	87.3	5.50	105.36	B. 5213	14.74	196
NS OF 4	B. 52144	40.81	13.22	86.6	5.40	103.45	B. 52389	14.03	
LOTS:	B. 5277	32.61	14.63	86.9	4.77	91.38	B. 5277	13.78	
	B. 52389	34.19	13.87	85.9	4.74	90.80	B. 5121	13.63	
	B. 52257	30.09	15.72	90.0	4.73	90.61	B. 52144	12.84	
	B. 5121	34.30	13.51	85.7	4.63	88.70	B. 52257	12.19	
	B. 52222	36.18	12.64	85.0	4.57	87.55	B. 52222	11.91	
	B. 52158	30.17	14.86	88.0	4.48	85.82	B. 5212	11.81	
	B. 5212	24.94	15.09	89.7	3.76	72.03	B. 52158	10.97	
	Mean :				5.22	100.00			
	Significant Difference, 20 : 1 :				1.00	19.16			
	Pln. Wales, Field La R.C. 5. Reaped 3.10.60 at 10.25 months.								
	Rainfall:—136.86 inches.								
	B. 53218	27.51	13.91	88.4	3.83	156.33	B. 53218	15.93	
	***B. 41227**	**21.60**	**13.74**	**85.6**	**2.97**	**121.22**	***B. 41227**	**13.89**	
	B. 53227	21.05	13.87	86.8	2.92	119.18	B. 5178	12.76	
	B. 5352	18.13	15.76	88.7	2.85	116.33	B. 53267	12.53	
	B. 5178	19.94	13.41	83.2	2.67	108.98	B. 53348	12.42	
	B. 53267	18.63	14.05	87.4	2.62	106.94	B. 53227	12.18	
	B. 53365	18.88	13.71	87.6	2.59	105.71	B. 53365	11.96	
	B. 5398	17.42	14.81	86.6	2.58	105.31	B. 5352	11.94	
NS OF 4	B. 53261	19.47	13.24	84.1	2.58	105.31	B. 53261	11.50	
OTS:	B. 53122	18.38	13.35	84.5	2.45	100.00	B. 50184	10.96	
	B. 53320	17.93	13.68	85.8	2.45	100.00	B. 53329	10.93	197
	B. 53348	15.33	15.96	88.5	2.45	100.00	B. 53200	10.85	
	B. 53200	17.46	13.22	84.3	2.31	94.29	B. 53320	10.84	
	B. 50184	17.13	12.87	85.4	2.20	89.80	B. 53317	10.71	
	B. 53329	15.30	14.23	88.4	2.18	88.98	B. 5398	10.39	
	B. 53355	13.60	14.61	87.9	1.99	81.22	B. 53122	10.35	
	B. 53317	14.02	13.69	85.5	1.92	78.37	B. 53355	9.83	
	B. 53362	14.84	12.78	83.4	1.90	77.55	B. 53362	9.71	
	B. 53165	14.99	12.65	81.6	1.89	77.14	B. 5321	9.15	
	B. 5321	12.94	13.07	84.5	1.69	68.98	B. 53165	8.29	
	Mean :				2.45	100.00			
	Significant Difference, 20 : 1 :				.88	35.92			

andard Cane,

TABLE II.—Results of Plant Cane Variety Trials on Demerara Frontland Clay.

	Variety.	Cane per Acre, Tons.	Pol. % Cane	Purity.	Sucrose in Cane per Acre, Tons.	Sucrose in Cane per Acre, % Mean.	Trial No.
Sophia, Field 8 West "B". Reaped 27.4.60 at 11.00 months. Rainfall:—92.37 inches.							
MEANS OF 5 PLOTS:	D. 278/55	41.72	15.70	88.7	6.55	122.20	244
	***B. 41227**	**41.91**	**14.76**	**90.0**	**6.19**	**115.48**	
	D. 26/52	42.05	13.88	88.5	5.84	108.96	
	D. 238/55	45.22	12.48	84.4	4.64	105.22	
	H. 37-1933	41.98	13.31	87.9	5.59	104.29	
	D.B. 131/54	40.27	13.78	87.2	5.55	103.54	
	Eros	37.08	14.94	89.9	5.54	103.36	
	N. Co. 300	36.72	14.06	87.1	5.16	96.27	
	D. 239/55	38.94	12.72	83.1	4.95	92.35	
	Q. 56	32.12	13.83	87.4	4.44	82.84	
	D. 49/54	33.39	10.42	79.3	3.48	64.93	
	Mean:				5.36	100.00	
	Significant Difference, 20: 1:				.89	16.60	
Sophia, Field 8 West "A". Reaped 29.4.60 at 11.00 months. Rainfall:—92.35 inches.							
MEANS OF 5 PLOTS:	D.B. 5/55	41.00	14.53	88.7	5.96	117.09	245
	D.B. 57/55	40.35	14.65	88.7	5.91	116.11	
	D.B. 162/55	38.53	14.80	88.1	5.70	111.98	
	***B. 41227**	**42.11**	**13.34**	**86.1**	**5.62**	**110.41**	
	D.B. 6/55	36.67	14.54	89.1	5.33	104.72	
	D.B. 154/55	40.27	12.52	85.3	5.04	99.02	
	D.B. 9/55	33.98	14.13	89.9	4.80	94.30	
	D.B. 33/55	34.85	13.47	86.0	4.69	92.14	
	D.B. 101/55	38.87	12.04	83.4	4.68	91.94	
	D.B. 10/55	35.72	12.41	85.3	4.43	87.03	
	D.B. 166/55	28.93	13.38	85.9	3.87	76.03	
	Mean:				5.09	100.00	
	Significant Difference, 20: 1:				.83	16.31	
Sophia, Field 8 East "A". Reaped 5.5.60 at 11.50 months. Rainfall:—96.81 inches.							
MEANS OF 5 PLOTS:	***B. 41227**	**39.08**	**15.47**	**89.1**	**6.04**	**139.17**	246
	P.O.J. 2878	33.91	14.88	88.7	5.04	116.13	
	B. 34104	34.85	12.62	85.9	4.40	101.38	
	Diamond 10	24.76	15.29	89.1	3.79	87.33	
	Co. 421	27.24	13.20	85.4	3.60	82.95	
	D. 625	24.56	13.01	83.5	3.19	73.50	
	Mean:				4.34	100.00	
	Significant Difference, 20: 1:				.94	21.66	

***Standard Cane.**

TABLE II. (Contd.)—Results of Plant Cane Variety Trials on Demerara Frontland Clay.

	Variety.	Cane per Acre, Tons.	Pol. % Cane.	Purity.	Sucrose in Cane per Acre, Tons.	Sucrose in Cane per Acre, % Mean.	Trial No.
	Sophia, Field 8 East "B". Reaped 5.5.60 at 11.50 months. Rainfall:—96.81 inches.						
MEANS OF 5 PLOTS:	***B. 41227**	**42.30**	**15.33**	**90.3**	**6.49**	**120.86**	247
	B. 5718	42.63	12.79	86.1	5.45	101.49	
	B. 57156	40.55	13.36	84.1	5.42	100.93	
	B. 5751	33.87	15.30	89.8	5.18	96.46	
	B. 5755	29.74	14.41	87.9	4.29	79.89	
	Mean :				5.37	100.00	
	Significant Difference, 20 : 1 :				.96	17.88	
	Sophia, Field 8 East "C". Reaped 7.5.60 at 11.50 months. Rainfall:—96.90 inches.						
MEANS OF 5 PLOTS:	***B. 41227**	**37.77**	**14.94**	**88.8**	**5.64**	**108.88**	248
	B. 52107	40.79	13.59	88.1	5.54	106.95	
	D. 50/54	38.87	14.04	87.5	5.46	105.41	
	D.B. 7/54	36.93	14.00	89.6	5.17	99.81	
	B. 52158	36.60	13.11	87.2	4.80	92.66	
	D. 201/55	35.83	12.54	83.5	4.49	86.68	
	Mean:				5.18	100.00	
	Significant Difference, 20: 1:				.83	16.02	
	Sophia, Field 8 East "D". Reaped 10.5.60 at 11.75 months. Rainfall:—96.96 inches.						
MEANS OF 5 PLOTS:	D.B. 9/54	55.42	13.25	90.4	7.34	124.20	249
	B. 54281	49.55	13.61	89.0	6.74	114.04	
	D.B. 125/54	45.72	14.65	89.5	6.70	113.37	
	B. 5490	43.29	14.90	90.6	6.45	109.14	
	***B. 41227**	**44.56**	**13.96**	**87.8**	**6.22**	**105.25**	
	B. 5411	40.43	15.30	91.1	6.18	104.57	
	Eros	40.39	14.58	88.8	5.89	99.66	
	B. 54277	40.71	14.13	87.5	5.75	97.29	
	D.B. 6/54	44.55	12.89	87.2	5.74	97.12	
	D.B. 13/54	37.68	14.93	90.0	5.63	95.26	
	D.B. 80/54	41.17	13.08	86.7	5.39	91.20	
	C.C. 102	40.22	13.21	88.1	5.31	89.85	
	D.B. 77/54	34.20	14.12	88.0	4.83	81.73	
	D.B. 68/54	32.99	14.00	88.1	4.62	78.17	
	Mean:				5.91	100.00	
	Significant Difference, 20 : 1 :				.80	13.54	

***Standard Cane.**

TABLE II. (Contd.)—Results of Plant Cane Variety Trials on Demerara Frontland Clay.

	Variety.	Cane. per Acre, Tons.	Pol. % Cane.	Purity.	Sucrose in Cane per Acre. Tons.	Sucrose in Cane per Acre. % Mean.	Trial No.
	Sophia, Field 14 West. Reaped 15.9.60 at 12.00 months. Rainfall:—98.26 inches.						
MEANS OF 5 PLOTS:	Co. 775	49.57	15.86	89.3	7.86	129.28	250
	***B. 41227**	**51.90**	**12.85**	**87.1**	**6.67**	**109.70**	
	D.B. 205/53	50.70	13.13	85.2	6.66	109.54	
	D.B. 255/53	47.03	13.50	88.7	6.35	104.44	
	D.B. 85/53	55.83	11.24	82.3	6.27	103.12	
	D.B. 172/53	42.36	14.11	89.1	6.26	102.96	
	Vesta	49.25	12.25	85.1	6.03	99.18	
	Ragnar	39.53	14.99	88.3	5.93	97.53	
	Co. 678	54.74	9.35	79.1	5.12	84.21	
	Co. 991	41.36	11.75	84.1	4.86	79.93	
	Co. 475	34.44	14.03	86.8	4.83	79.44	
	Mean :				6.08	100.00	
	Significant Difference, 20 : 1 :				.83	13.65	
	Sophia, Field 1 West "B". Reaped 5.10.60 at 12.25 months. Rainfall :— 98.34 inches.						
MEANS OF 5 PLOTS:	***B. 41227**	**43.88**	**13.78**	**84.6**	**6.05**	**120.76**	251
	P.R. 1000	38.91	13.81	85.4	5.37	107.19	
	B. 52158	45.75	11.58	78.0	5.30	105.79	
	D. 201/55	39.38	12.85	84.4	5.06	101.00	
	Q. 56	34.76	13.96	83.6	4.85	96.81	
	H. 44-3098	40.17	12.00	80.6	4.82	96.21	
	H. 37-1933	43.22	10.58	80.0	4.57	91.22	
	N. Co. 310	28.69	14.07	84.7	4.04	80.64	
	Mean :				5.01	100.00	
	Significant Difference, 20 : 1 :				1.27	25.35	
	Sophia, Field 1 West "A". Reaped 11.10.60 at 12.50 months. Rainfall :— 100.47 inches.						
MEANS OF 4 PLOTS:	D.B. 205/53	48.16	13.86	88.0	6.67	115.20	252
	***B. 41227**	**45.85**	**13.93**	**89.0**	**6.39**	**110.36**	
	B. 5452	42.19	13.89	89.1	5.86	101.21	
	N. Co. 300	40.62	14.42	89.5	5.86	101.21	
	F. 31-436	37.36	13.71	86.6	5.12	88.43	
	C.P. 44-155	37.82	12.75	85.8	4.82	83.25	
	Mean :				5.79	100.00	
	Significant Difference, 20 : 1 :				.63	10.88	

***Standard Cane.**

TABLE II. (Contd.)—Results of Plant Cane Variety Trials on Demerara Frontland Clay.

	Variety.	Cane per Acre, Tons.	Pol. % Cane.	Purity.	Sucrose in Cane per Acre. Tons.	Sucrose in Cane per Acre. % Mean.	Trial No.
	Sophia, Field 15 East. Reaped 24.11.60 at 12.00 months.						
	Rainfall :— 97.15 inches.						
MEANS OF 5 PLOTS:	B. 53227	52.46	15.03	88.1	7.89	114.02	253
	D. 26/52	48.16	16.36	90.6	7.88	113.87	
	B. 54277	50.41	15.43	87.8	7.78	112.43	
	***B. 41227**	**52.59**	**14.72**	**88.0**	**7.74**	**111.85**	
	B. 54142	52.72	14.41	87.4	7.60	109.83	
	B. 54262	56.82	13.33	86.3	7.58	109.54	
	B. 51131	45.78	16.48	89.5	7.54	108.96	
	B. 54163	47.31	15.59	88.4	7.38	106.65	
	B. 5490	50.52	14.07	87.5	7.11	102.75	
	D. 50/54	49.30	13.72	85.0	6.77	97.83	
	D.B. 85/53	57.69	9.69	75.9	5.59	80.78	
	D. 49/54	47.03	11.54	80.4	5.43	78.47	
	P.R. 1000	40.28	13.42	86.5	5.41	78.18	
	P.R. 905	34.67	14.86	87.1	5.15	74.42	
	Mean:				6.92	100.00	
	Significant Difference, 20: 1:				.85	12.28	
	Pln. L.B.I Field 36 "A". Reaped 29.9.60 at 15.25 months.						
	Rainfall :— 94.90 inches.						
MEANS OF 5 PLOTS:	D. 26/52	48.05	16.18	88.9	7.78	127.33	254
	D. 49/46	47.74	14.45	86.1	6.90	112.93	
	***B. 41227**	**45.41**	**14.38**	**86.3**	**6.53**	**106.87**	
	B. 50275	48.54	12.60	86.5	6.11	100.00	
	D. 245/55	43.75	13.55	86.4	5.93	97.05	
	B. 52316	44.85	12.96	83.0	5.81	95.09	
	Eros	40.80	14.20	85.9	5.79	94.76	
	B. 5098	41.51	12.90	84.9	5.36	87.72	
	B. 46364	38.92	12.34	83.3	4.80	78.56	
	Mean:				6.11	100.00	
	Significant Difference, 20: 1:				.81	13.26	
	Pln. Non Pareil, Field V. 2. Reaped 1.9.60 at 13.75 months.						
	Rainfall :— 76.28 inches.						
MEANS OF 5 PLOTS:	***B. 41227**	**46.08**	**11.83**	**82.4**	**5.45**	**112.37**	255
	D. 202/55	38.71	13.53	84.1	5.24	108.04	
	D.B. 197/54	40.74	12.51	84.7	5.09	104.95	
	D.B. 81/54	42.55	11.62	81.3	4.94	101.86	
	D. 201/55	37.90	12.42	82.1	4.71	97.11	
	D. 214/55	34.58	13.38	85.3	4.63	95.46	
	D.B. 80/54	39.20	11.76	82.4	4.61	95.05	
	D.B. 83/54	36.05	11.43	82.6	4.12	84.95	
	Mean:				4.85	100.00	
	Significant Difference, 20: 1:				—	—	

*** Standard Cane.**

TABLE II. (Contd.) —**Results of Plant Cane Variety Trials on Demerara Frontland Clay.**

	Variety.	Cane per Acre, Tons.	Pol. % Cane.	Purity.	Sucrose in Cane per Acre.		Trial No.
					Tons.	% Mean.	
	Pln. Ogle, Field C.L. 36 L.S. Reaped 15.11.60 at 12.75 months.						
	Rainfall :— 86.14 inches.						
MEANS OF 5 PLOTS :	B. 54277	39.21	16.91	89.4	6.63	131.29	256
	H. 38-2915	38.35	14.35	88.0	5.50	108.91	
	B. 53227	35.29	15.03	89.1	5.30	104.95	
	D. 26/52	32.11	16.20	89.0	5.20	102.97	
	***B. 41227**	**34.85**	**14.78**	**86.7**	**5.15**	**101.98**	
	Co. 991	34.70	12.82	82.5	4.45	88.12	
	B. 54237	28.77	14.64	86.1	4.21	83.37	
	H. 39-7028	29.48	13.49	85.5	3.98	78.81	
	Mean :				50.5	100.00	
	Significant Difference, 20 : 1 :				.52	10.30	
	Results of Plant Cane Variety Trials on Berbice Frontland Clay.						
	Pln. Albion, Field Bel. 46. Reaped 22.9.60 at 13.00 months.						
	Rainfall :— 83.56 inches.						
MEANS OF 5 PLOTS :	D.B. 9/55	52.56	15.35	88.8	8.07	116.45	257
	***B. 41227**	**53.93**	**14.75**	**86.6**	**7.96**	**114.86**	
	D.B. 5/55	50.81	14.91	86.5	7.58	109.38	
	D.B. 6/55	47.33	15.72	87.1	7.44	107.36	
	D.B. 13/55	46.23	13.72	85.1	6.34	91.49	
	B. 50267	46.60	13.59	84.5	6.33	91.34	
	D.B. 166/55	41.18	14.38	87.8	5.92	85.43	
	D.B. 154/55	44.95	12.84	82.6	5.77	83.26	
	Mean :				6.93	100.00	
	Significant Difference, 20 : 1 :				.67	9.67	
	Pln. Blairmont, Field R.P. 3. Reaped 13.10.60 at 11.50 months.						
	Rainfall :— 73.74 inches.						
MEANS OF 5 PLOTS :	D. 141/46	40.98	15.50	88.7	6.35	106.01	258
	B. 50135	42.21	15.04	89.2	6.35	106.01	
	***B. 41227**	**39.29**	**15.51**	**89.8**	**6.10**	**101.84**	
	B. 47258	39.23	15.50	89.5	6.08	101.50	
	D. 26/52	36.10	16.55	90.6	5.97	99.67	
	B. 51131	35.64	16.58	90.7	5.91	98.66	
	C.P. 44-101	34.47	17.04	90.7	5.87	98.00	
	B. 37161	33.22	15.86	91.6	5.27	87.98	
	Mean :				5.99	100.00	
	Significant Difference, 20 : 1 :				—	—	

* **Standard Cane.**

TABLE II. (Contd.)—Results of Plant Cane Variety Trials on Berbice Frontland Clay.

	Variety.	Cane per Acre, Tons.	Pol. % Cane.	Purity.	Sucrose in Cane per Acre.		Trial No.
					Tons.	% Mean.	
Pln. Port Mourant, Field C.O.G. 24 "A". Reaped 30.3.60 at 11.25 months. Rainfall :— 58.33 inches.							
MEANS OF 5 PLOTS:	***B. 41227**	**36.00**	**15.59**	**87.6**	**5.61**	**124.39**	259
	B. 51116	33.49	15.59	87.8	5.22	115.74	
	D. 26/52	32.19	15.82	88.4	5.09	112.86	
	B. 53200	31.30	14.30	84.5	4.48	99.33	
	B. 51134	29.01	15.04	86.4	4.36	96.67	
	Vesta	29.83	14.04	86.2	4.19	92.90	
	D.B. 76/56	30.78	13.41	86.1	4.13	91.57	
	Co. 413	24.95	12.08	82.8	3.01	66.74	
	Mean:				4.51	100.00	
	Significant Difference, 20 : 1:				.70	15.52	
Pln. Port Mourant, Field C.O.G. 24 "B". Reaped 30.9.60 at 11.25 months. Rainfall :— 58.33 inches.							
MEANS OF 5 PLOTS:	***B. 41227**	**35.38**	**15.78**	**87.7**	**5.58**	**129.77**	260
	N. Co. 330	33.60	16.27	87.3	5.46	126.98	
	B. 51131	27.03	17.03	89.6	4.60	106.98	
	B. 5124	25.83	16.02	85.6	4.14	96.28	
	D.B. 169/53	25.08	16.10	88.9	4.04	93.95	
	P.R. 1000	26.76	15.06	84.9	4.03	93.72	
	B. 50135	26.62	14.19	84.3	3.78	87.91	
	F. 31-436	21.84	12.81	81.3	2.80	65.12	
	Mean:				4.30	100.00	
	Significant Difference, 20 : 1:				.81	18.84	

Results of Plane Cane Variety Trials on Riverside Clay.

Pln. Diamond, Field G.D. 17. Reaped 29.3.60 at 9.50 months. Rainfall :— 71.09 inches.

MEANS OF 5 PLOTS:	B. 50135	46.65	14.50	88.6	6.76	123.36	261
	***B. 41227**	**44.36**	**14.47**	**88.1**	**6.42**	**117.16**	
	B. 53218	41.88	14.08	86.6	5.90	107.66	
	B. 5352	38.32	13.81	86.7	5.29	96.53	
	D. 238/55	41.95	12.45	83.5	5.23	95.44	
	B. 53200	36.10	14.41	87.5	5.20	94.89	
	B. 53227	36.54	13.92	87.9	5.09	92.88	
	D.B. 169/53	31.65	16.05	90.7	5.08	92.70	
	B. 5398	33.82	12.84	85.9	4.34	79.20	
	Mean:				5.48	100.00	
	Significant Difference, 20 : 1:				.69	12.59	

* Standard Cane.

TABLE II. (Contd.)—**Results of Plant Cane Variety Trials on Riverside Clay.**

	Variety.	Cane per Acre, Tons.	Pol. % Cane.	Purity.	Sucrose in Cane per Acre. Tons.	Sucrose in Cane per Acre. % Mean.	Trial No.
Pln. Farm, Field C.G. 45 W. Reaped 16.11.60 at 13.00 months. Rainfall:—81.58 inches.							
MEANS OF 5 PLOTS:	***B. 41227**	**56.37**	**15.44**	**90.2**	**8.70**	**124.82**	262
	H. 38–2915	55.98	13.45	88.3	7.53	108.03	
	D. 26/56	53.37	14.07	85.9	7.51	107.75	
	B. 53227	44.59	15.48	90.7	6.90	99.00	
	D. 26/52	43.00	15.86	89.5	6.82	97.85	
	B. 52144	46.76	14.52	86.8	6.79	97.42	
	Co. 991	45.41	**13.52**	85.7	6.14	88.09	
	D. 31/56	36.98	14.44	87.3	5.34	76.61	
	Mean :				6.97	100.00	
	Significant Difference, 20 : 1 :				.98	14.06	
Pln. Rose Hall, Field Pros. 7. Reaped 9.11.60 at 14.75 months. Rainfall:—89.90 inches							
MEANS OF 5 PLOTS:	D. 278/55	43.23	16.58	87.0	7.17	113.27	263
	***B. 41227**	**45.05**	**15.28**	**85.3**	**6.88**	**108.69**	
	D. 239/55	47.65	13.92	81.9	6.63	104.74	
	D.B. 33/55	41.05	15.38	88.7	6.31	99.68	
	D. 219/55	40.81	14.87	86.4	6.07	95.89	
	D.B. 57/55	42.03	14.09	87.2	5.92	93.52	
	D. 236/55	41.28	14.29	84.6	5.90	93.21	
	D. 238/55	42.78	13.40	84.5	5.73	90.52	
	Mean :				6.33	100.00	
	Significant Difference, 20: 1:				—	—	

Results of Plant Cane Variety Trials on Pegassy Clay.

Pln. Diamond, Field G.D. 104. Reaped 12.8.60 at 14.00 months. Rainfall:—132.89 inches

MEANS OF 5 PLOTS:	D.B. 255/53	47.57	13.96	90.1	6.64	121.39	264
	B. 52316	47.90	13.60	89.6	6.51	119.01	
	B. 52341	50.70	12.34	87.2	6.26	114.44	
	***B. 41227**	**42.47**	**14.19**	**90.1**	**6.03**	**110.24**	
	B. 52315	46.33	12.87	85.4	5.96	108.96	
	B. 52107	44.91	12.44	87.8	5.59	102.19	
	B. 52321	40.83	13.37	89.3	5.46	99.82	
	B. 52144	33.96	12.31	86.6	4.18	76.42	
	D. 239/55	20.89	12.63	84.4	2.64	48.26	
	Mean:				5.47	100.00	
	Significant Difference, 20: 1:				1.04	19.01	

***Standard Cane.**

TABLE II. (Contd.)—**Results of Plant Cane Variety Trials on Pegassy Clay.**

	Variety.	Cane per Acre, Tons	Pol. % Cane.	Purity.	Sucrose in Cane per Acre. Tons.	Sucrose in Cane per Acre. % Mean.	Trial No.
Pln. Diamond, Field G.D. 116 L.S. Reaped 10.11.60 at 11.75 months. Rainfall: — 94.89 inches.							
MEANS OF 5 PLOTS:	D. 26/52	34.56	15.64	90.0	5.41	144.27	265
	D.B. 7/54	34.96	15.10	89.3	5.28	140.80	
	***B. 41227**	**31.33**	**13.82**	**85.5**	**4.33**	**115.47**	
	B. 53227	28.85	13.80	85.4	3.98	106.13	
	D.B. 172/53	23.37	13.88	87.1	3.24	86.40	
	D.B. 85/53	27.76	11.50	77.5	3.19	85.07	
	B. 54262	20.64	11.99	76.0	2.48	66.13	
	D.B. 205/53	19.31	11.05	76.1	2.13	56.80	
	Mean :				3.75	100.00	
	Significant Difference, 20 : 1 :				.46	12.27	
Pln. Enmore, Field B.A. 26. Reaped 1.3.60 at 12.25 months. Rainfall:—67.07 inches.							
MEANS OF 5 PLOTS : 8	***B. 41227**	**38.54**	**14.92**	**88.2**	**5.75**	**116.16**	266
	B. 5277	38.22	14.96	88.7	5.72	115.52	
	B. 5212	35.67	15.97	90.6	5.70	115.15	
	B. 5452	34.07	15.38	90.5	5.25	106.06	
	D. 49/46	36.55	14.20	86.6	5.19	104.85	
	B. 52158	33.56	14.77	87.7	4.96	100.20	
	N.Co. 300	27.03	13.40	86.3	3.62	73.13	
	P.R. 1000	26.42	12.76	84.3	3.37	68.08	
	Mean :				4.95	100.00	
	Significant Difference, 20 : 1 :				.49	9.90	
Pln. Leonora, Field P.L. 54. Reaped 15.11.60 at 12.25 months. Rainfall:—83.54 inches.							
MEANS OF 5 PLOTS :	***B. 41227**	**35.91**	**15.96**	**86.8**	**5.73**	**125.38**	267
	D. 26/52	31.66	16.75	90.4	5.30	115.97	
	B. 5277	31.73	16.25	90.5	5.16	112.91	
	D. 50/54	36.45	13.07	81.1	4.76	104.16	
	D.B. 13/54	30.09	15.40	89.0	4.64	101.53	
	D.B. 85/53	33.38	12.33	79.3	4.12	90.15	
	D.B. 205/53	26.45	13.03	80.3	3.44	75.27	
	D.B. 255/53	22.36	15.25	88.4	3.41	74.62	
	Mean :				4.57	100.00	
	Significant Difference, 20: 1:				.98	21.44	

*** Standard Cane.**

TABLE II. (Contd.)—**Results of Plant Cane Variety Trials on Pegassy Clay.**

	Variety.	Cane per Acre, Tons.	Pol. % Cane.	Purity.	Sucrose in Cane per Acre.		Trial No.
					Tons.	% Mean.	
Pln. Lusignan, Field G.H.W.E. 5 A. Reaped 25.8.60 at 13.75 months. Rainfall:—98.55 inches.							
MEANS OF 5 PLOTS:	D. 249/55	56.47	14.38	90.9	8.12	111.69	268
	B. 50275	68.56	11.74	85.7	8.05	110.73	
	B. 5411	59.68	13.07	88.3	7.80	107.29	
	***B. 41227**	**60.86**	**12.78**	**87.0**	**7.78**	**107.02**	
	B. 5490	53.66	13.53	89.3	7.26	99.86	
	B. 54277	54.64	13.05	86.3	7.13	98.07	
	D.B. 7/54	49.98	12.26	87.2	6.13	84.32	
	D.B. 6/54	51.40	11.39	85.9	5.86	80.61	
	Mean:				7.27	100.00	
	Significant Difference, 20: 1:				1.10	15.13	

***Standard Cane.**

TABLE III.—Results of First Ratoon Variety Trials on Demerara Frontland Clay.

	Variety.	Cane per Acre, Tons.	Pol. % Cane.	Purity	Sucrose in Cane per Acre. Tons.	Sucrose in Cane per Acre. % Mean.	Combined results for 2 Crops, Plants and 1st Ratoons. Variety.	Combined results for 2 Crops, Plants and 1st Ratoons. Sucrose in Cane per Acre, Tons.	Trial No.
	Sophia, Field 16 West "B". Reaped 2.4.60 at 12.50 months. Rainfall:—93.17 inches.								
MEANS OF 5 PLOTS:	***B. 41227**	**34.21**	**14.92**	**88.0**	**5.10**	**128.79**	***B. 41227**	**12.55**	219
	B. 5277	33.40	14.18	86.8	4.74	119.70	B. 5277	10.96	
	B. 52222	32.31	14.04	86.4	4.53	114.39	D. 44/52	10.38	
	D. 44/52	30.67	14.08	84.3	4.32	109.09	D.B. 169/53	10.36	
	H. 39-5803	30.68	14.04	88.2	4.31	108.84	B. 52222	10.35	
	D. 45/52	32.54	12.94	82.9	4.21	106.31	D. 45/52	9.75	
	C.P. 44-101	33.78	10.77	80.2	3.64	91.92	H. 39-3633	9.56	
	D.B. 169/53	25.14	13.60	89.0	3.42	86.36	C.P. 44-101	9.24	
	H. 39-3633	33.46	9.70	75.2	3.25	82.07	H. 39-5803	8.88	
	D. 55/52	23.12	13.53	83.8	3.13	79.04	D. 55/52	7.47	
	Q. 57	24.07	12.28	81.9	2.95	74.49	Q. 57	6.87	
	Mean:				3.96	100.00			
	Significant Difference, 20: 1:				.71	17.93			
	Sophia, Field 16 East "A". Reaped 12.4.60 at 12.25 months. Rainfall:—92.62 inches.								
MEANS OF 5 PLOTS:	B. 50135	32.25	13.60	86.6	4.39	119.95	B. 50135	11.02	221
	***B. 41227**	**29.45**	**14.39**	**89.4**	**4.24**	**115.85**	***B. 41227**	**10.15**	
	B. 46364	28.82	13.81	88.2	3.98	108.74	B. 46364	9.19	
	H. 44-3098	29.55	13.42	86.3	3.97	108.47	B. 42231	8.91	
	H. 39-7028	27.87	12.99	86.4	3.62	98.91	H. 39-7028	8.81	
	B. 42231	26.98	12.63	83.8	3.41	93.17	H. 44-3098	8.50	
	B. 5037	16.44	12.21	85.5	2.01	54.92	B. 5037	6.60	
	Mean :				3.66	100.00			
	Significant Difference, 20 : 1 :				.93	25.41			
	Sophia, Field 6 West "A". Reaped 30.4.60 at 12.50 months. Rainfall:—95.14 inches.								
MEANS OF 6 PLOTS:	***B. 41227**	**43.04**	**14.64**	**88.3**	**6.30**	**125.75**	***B. 41227**	**15.14**	220
	B. 34104	37.76	15.03	90.3	5.67	113.17	B. 34104	14.19	
	P.O.J. 2878	36.24	14.88	88.1	5.39	107.58	P.O.J. 2878	11.86	
	Co. 421	34.99	13.99	86.4	4.66	93.01	Co. 421	11.01	
	Diamond 10	33.69	13.10	85.4	4.41	88.02	Diamond 10	9.41	
	D. 625	26.63	13.59	86.4	3.62	72.26	D. 625	8.65	
	Mean :				5.01	100.00			
	Significant Difference, 20 : 1 :				.76	15.17			

* **Standard Cane.**

TABLE III. (Contd.)—Results of First Ratoon Variety Trials on **Demerara Frontland Clay.**

	Variety.	Cane. per Acre, Tons.	Pol. % Cane.	Purity.	Sucrose in Cane per Acre. Tons.	Sucrose in Cane per Acre. % Mean.	Combined results for 2 Crops, Plants and 1st Ratoons. Variety.	Combined results for 2 Crops, Plants and 1st Ratoons. Sucrose in Cane per Acre, Tons.	Trial No.
	Sophia, Field 10 East "B". Reaped 16.8.60 at 12.25 months. Rainfall:—106.39 inches.								
	B. 54142	43.84	15.54	90.7	6.81	118.03	B. 54142	11.03	
	B. 54262	46.63	14.30	89.5	6.67	115.60	B. 5490	10.78	
	B. 54281	46.63	14.17	90.2	6.61	114.56	B. 54281	10.64	
	B. 5490	41.33	15.53	91.9	6.42	111.27	B. 54262	10.44	
	D. 201/55	42.20	14.53	86.4	6.13	106.24	D. 201/55	10.15	
MEANS OF 5 PLOTS.	B. 54227	42.46	13.98	87.8	5.94	102.95	B. 54277	9.87	
	***B. 41227**	**39.82**	**14.75**	**89.7**	**5.87**	**101.73**	D. 202/55	9.80	222
	D. 249/55	39.62	14.49	90.7	5.74	99.48	D. 249/55	9.58	
	D. 195/55	36.74	14.72	87.9	5.41	93.76	D. 214/55	9.29	
	D. 214/55	36.83	14.39	88.6	5.30	91.85	D. 195/55	9.15	
	D. 202/55	37.21	14.05	86.1	5.23	90.64	***B. 41227**	**8.89**	
	B. 54215	34.80	14.68	90.3	5.11	88.56	B. 54215	8.19	
	D. 219/55	33.27	14.80	89.2	4.92	85.27	D. 219/55	8.17	
	D. 180/55	31.03	15.12	89.7	4.69	81.28	D. 180/55	7.96	
	Mean :				5.77	100.00			
	Significant difference, 20 : 1 :				.65	11.27			
	Sophia, Field 10 East "A". Reaped 18.8.60 at 12.25 months. Rainfall :— 105.48 inches.								
	D.B. 57/55	41.09	14.63	87.6	6.01	117.38	C.P. 44–101	11.71	
	C.P. 44–101	40.99	14.43	88.9	5.91	115.43	D.B. 57/55	11.17	
	***B. 41227**	**38.25**	**14.64**	**89.2**	**5.60**	**109.38**	D. 39/46	11.04	
	D. 53/54	44.68	12.54	85.8	5.60	109.38	D. 53/54	10.62	
	D. 39/46	42.28	12.26	86.3	5.18	101.17	***B. 41227**	**10.28**	
MEANS OF 5 PLOTS :	D. 50/54	37.51	13.79	85.7	5.17	100.98	D. 50/54	10.25	
	B. 53218	37.22	13.75	87.1	5.12	100.00	H. 38–2915	10.23	
	B. 46364	38.50	12.96	86.0	4.99	97.46	B. 46364	10.20	223
	D. 278/55	33.60	14.78	88.1	4.97	97.07	B. 53218	10.01	
	H. 38–2915	35.84	13.61	87.0	4.88	95.31	D. 278/55	9.86	
	D. 51/54	39.57	12.23	83.4	4.84	94.53	D. 51/54	9.80	
	D. 49/54	39.31	12.19	85.3	4.79	93.55	D. 49/54	9.25	
	Q. 56	32.62	13.31	85.7	4.34	84.77	D. 246/55	8.23	
	D. 246/55	39.71	10.66	81.3	4.23	82.62	Q. 56	7.87	
	Mean :				5.12	100.00			
	Significant Difference, 20 : 1 :				.91	17.77			
	Sophia, Field 13 East "B". Reaped 23.8.60 at 11.00 months. Rainfall:—94.60 inches.								
	D.B. 9/54	51.80	13.85	89.3	7.17	118.71	D.B. 9/54	14.16	
	***B. 41227**	**47.71**	**14.43**	**88.7**	**6.88**	**113.91**	***B. 41227**	**13.61**	
	D.B. 68/54	45.24	15.01	88.8	6.79	112.42	D.B. 125/54	13.28	
	D.B. 131/54	46.64	13.36	87.8	6.23	103.15	D.B. 68/54	13.05	
	D.B. 125/54	47.50	13.07	88.0	6.21	102.81	D.B. 13/54	12.90	
	D.B. 81/54	47.39	12.96	84.5	6.14	101.66	D.B. 81/54	12.51	
MEANS OF 5 PLOTS :	D.B. 197/54	46.06	**12.97**	86.5	5.97	98.84	D. 50/54	12.28	
	D.B. 80/54	44.11	13.24	86.6	5.84	96.69	D.B. 131/54	12.27	224
	D.B. 13/54	42.78	13.60	88.6	5.82	96.36	D.B. 197/54	12.06	
	D.B. 7/54	44.91	12.86	84.7	5.78	95.70	D.B. 7/54	11.68	
	D. 50/54	46.11	12.46	84.4	5.75	95.20	D.B. 77/54	11.52	
	D.B. 77/54	43.17	12.74	85.3	5.50	91.06	D.B. 80/54	11.37	
	D. 47/54	39.72	13.69	89.3	5.44	90.07	D. 47/54	11.22	
	D.B. 6/54	42.82	11.78	84.6	5.04	83.44	D.B. 6/54	10.35	
	Mean :				6.04	100.00			
	Significant Difference, 20: 1:				.85	14.07			

*** Standard Cane.**

TABLE III. (Contd.) —Results of First Ratoon Variety Trials on Demerara Frontland Clay.

	Variety.	Cane per acre, Tons.	Pol. % Cane	Purity.	Sucrose in Cane per Acre. Tons.	Sucrose in Cane per Acre. % Mean.	Combined results for 2 Crops, Plants and 1st Ratoons. Variety.	Combined results for 2 Crops, Plants and 1st Ratoons. Sucrose in Cane per acre, Tons.	Trial No.
Sophia, Field 13 East "A". Reaped 26.8.60 at 10.75 months. Rainfall:—96.37 inches.									
MEANS OF 5 PLOTS.	B. 51116	47.66	14.18	88.7	6.76	113.80	B. 53227	13.57	225
	B. 53227	46.55	14.53	89.1	6.76	113.80	*B. 41227	13.55	
	B. 50275	51.03	12.86	85.9	6.56	110.44	D.B. 255/53	13.00	
	D.B. 255/53	45.32	14.37	88.7	6.51	109.60	D.B. 85/53	12.98	
	*B. 41227	44.74	14.29	88.4	6.39	107.58	B. 50275	12.97	
	P.R. 1000	41.34	15.17	89.7	6.27	105.56	B. 51116	12.92	
	D. 49/54	52.53	11.51	81.1	6.05	101.85	P.R. 1000	12.44	
	D.B. 85/53	58.13	10.13	79.9	5.89	99.16	H. 37-1933	11.68	
	H. 37-1933	44.55	12.58	85.4	5.60	94.28	H. 44-3098	11.35	
	D. 51/54	51.60	10.82	80.2	5.58	93.94	D.B. 169/53	11.26	
	H. 44-3098	40.16	13.35	89.3	5.36	90.24	D. 53/54	11.19	
	D.B. 169/53	35.21	14.86	89.8	5.23	88.05	D. 51/54	11.09	
	D. 53/54	48.25	10.71	80.1	5.17	87.04	D. 49/54	10.86	
	B. 5398	39.66	12.58	88.2	4.99	84.01	B. 5398	10.30	
	Mean:				5.94	100.00			
	Significant Difference, 20 : 1:				.82	13.80			
Pln. Farm, Field No. 30. Reaped 24.2.60 at 11.25 months. Rainfall:—82.92 inches.									
MEANS OF 5 PLOTS:	B. 52107	76.95	12.94	86.9	9.96	115.55	*B. 41227	19.56	227
	*B. 41227	68.34	13.58	88.0	9.28	107.66	D. 133/46	19.20	
	D. 133/46	66.18	14.02	89.4	9.28	107.66	B. 52107	18.55	
	B. 5277	62.16	14.13	88.8	8.78	101.86	B. 5277	18.30	
	B. 52144	67.74	12.65	86.8	8.57	99.42	B. 52158	16.94	
	B. 52158	58.63	14.07	88.8	8.25	95.71	H. 44-3098	16.08	
	H. 44-3098	57.18	14.38	90.5	8.22	95.36	B. 52144	15.30	
	H. 39-5803	45.91	14.50	90.4	6.66	77.26	H. 39-5803	13.15	
	Mean :				8.62	100.00			
	Significant Difference, 20 : 1 :				1.25	14.50			
Pln. L.B.I., Field C.M. 34. Reaped 28.4.60 at 12.75 months. Rainfall:—72.39 inches.									
MEANS OF 5 PLOTS:	D. 49/46	44.01	14.28	86.7	6.28	115.44	D. 49/46	11.80	228
	D. 141/46*	39.36	15.01	87.3	5.91	108.64	D. 141/46	11.31	
	H. 38-2915	39.61	13.91	88.9	5.51	101.29	B. 50347	10.83	
	*B. 41227	38.62	14.22	86.6	5.49	100.92	*B. 41227	10.44	
	B. 53200	39.16	13.63	84.9	5.34	98.16	B. 53200	10.10	
	B. 50347	39.30	13.35	85.2	5.25	96.51	H. 38-2915	9.84	
	D. 50/54	37.84	12.97	83.2	4.91	90.26	D. 50/54	9.69	
	C.P. 44-101	34.32	14.03	86.2	4.81	88.42	C.P. 44-101	9.58	
	Mean :				5.44	100.00			
	Significant Difference, 20 : 1 :				.70	12.87			

*Standard Cane.

TABLE III. (Contd.) —Results of First Ratoon Variety Trials on Demerara Frontland Clay.

	Variety.	Cane per Acre, Tons.	Pol. % Cane.	Purity.	Sucrose in Cane per Acre.		Combined results for 2 Crops, Plants and 1st Ratoons.		Trial No.
					Tons.	% Mean.	Variety.	Sucrose in Cane per Acre, Tons.	
	Pln. Ogle, Field 59 O. Reaped 9.11.60 at 11.75 months. Rainfall: 87.64 inches.								
MEANS OF 5 PLOTS:	D. 141/46	40.05	16.02	91.0	6.42	127.13	D. 141/46	12.99	226
	***B. 41227**	**39.59**	**14.85**	**88.8**	**5.88**	**116.44**	***B. 41227**	**12.89**	
	B. 5212	33.12	15.33	88.9	5.08	100.59	B. 52144	11.41	
	B. 52144	35.63	14.14	88.0	5.04	99.80	B. 5212	11.15	
	B. 53348	31.44	15.58	89.9	4.90	97.03	B. 53348	10.98	
	B. 5124	30.99	15.60	90.4	4.83	95.64	B. 5124	10.71	
	B. 52158	33.91	15.52	85.8	4.58	90.69	B. 52158	10.50	
	B. 5398	27.02	13.53	87.3	3.66	72.48	B. 5398	8.36	
	Mean:				5.05	100.00			
	Significant Difference, 20: 1:				.70	13.86			
	Pln. Versailles, Field M.Z. 20 W.S. Reaped 17.2.60 at 11.75 months. Rainfall;—99.52 inches.								
MEANS OF 5 PLOTS.	***B. 41227**	**47.70**	**13.96**	**88.8**	**6.66**	**127.34**	***B. 41227**	**13.49**	229
	B. 50135	43.31	13.17	88.0	5.70	108.99	B. 50135	11.76	
	B. 50347	42.85	13.04	87.5	5.59	106.88	B. 51131	11.62	
	B. 51131	37.48	14.45	89.1	5.42	103.63	B. 50347	10.73	
	B. 51211	40.10	13.53	89.4	5.42	103.63	B. 51134	10.07	
	B. 51134	37.05	12.94	85.2	4.79	91.59	B. 51211	9.61	
	P.R. 1000	33.74	12.48	85.1	4.21	80.50	P.R. 1000	8.47	
	Q. 47	35.71	11.25	83.6	4.02	76.86	Q. 47	7.91	
	Mean :				5.23	100.00			
	Significant Difference, 20: 1:				.75	14.34			
	Results of a First Ratoon Variety Trial on Berbice Frontland Clay.								
	Pln. Rose Hall, Field Tap. 30. Reaped 23.9.60 at 12.00 months. Rainfall;—77.95 inches.								
MEANS OF 5 PLOTS:	D. 141/46	55.39	16.28	89.1	9.01	117.01	D. 141/46	19.30	232
	B. 50347	58.74	14.05	84.1	8.25	107.14	B. 50347	17.60	
	B. 53227	52.82	15.36	87.2	8.11	105.32	H. 38–2915	17.03	
	***B. 41227**	**51.98**	**14.96**	**86.5**	**7.78**	**101.04**	B. 53227	16.76	
	B. 51116	50.95	14.84	86.8	7.56	98.18	***B. 41227**	**16.65**	
	H. 38–2915	52.16	14.42	87.5	7.52	97.66	B. 51116	16.50	
	B. 5277	48.42	14.63	83.1	7.09	92.08	B. 5277	15.37	
	N.Co. 300	46.44	13.59	81.7	6.31	81.95	N.Co. 300	14.29	
	Mean:				7.70	100.00			
	Significant Difference, 20: 1:				.93	12.08			

* **Standard Cane.**

TABLE III. (Contd.) **Results of First Ratoon Variety Trials on Riverside Clay.**

	Variety.	Cane per Acre, Tons.	Pol. % Cane.	Purity.	Sucrose in Cane per Acre. Tons.	Sucrose in Cane per Acre. % Mean.	Combined results for 2 Crops, Plants and 1st Ratoons. Variety.	Combined results for 2 Crops, Plants and 1st Ratoons. Sucrose in Cane per Acre, Tons.	Trial No.
	Pln. Ruimveldt, Field 48 South. Reaped 8.8.60 at 12.00 months. Rainfall: 91.35 inches.								
MEANS OF 5 PLOTS:	D.B. 5/55	33.80	14.17	90.5	4.79	121.57	D.B. 154/55	8.00	233
	D.B. 154/55	35.80	13,18	87.4	4.72	119.80	D.B. 5/55	7.68	
	D.B. 49/55	30.48	13.86	88.2	4.22	107.11	D.B. 49/55	7.39	
	D.B. 7/55	30.00	12.53	86.8	3.76	95.43	***B. 41227**	**7.05**	
	***B. 41227**	**29.66**	**12.57**	**86.3**	**3.73**	**94.67**	D.B. 13/55	6.01	
	D.B. 13/55	31.05	11.34	85.2	3.52	89.34	D.B. 7/55	5.72	
	D.B. 101/55	30.11	11.57	82.4	3.48	88.32	D.B. 101/55	5.30	
	D.B. 1/55	25.20	13.11	87.3	3.31	84.01	D.B. 1/55	4.92	
	Mean:				**3.94**	**100.00**			
	Significant Difference, 20 : 1 :				**.46**	**11.68**			
	Pln. Wales, Field Potosi No. 2. Reaped 24.5.60 at 9.00 months. Rainfall: 49.24 inches.								
MEANS OF 4 PLOTS:	***B. 41227**	**26.45**	**12.93**	**88.8**	**3.42**	**121.28**	B. 50347	8.11	234
	B. 50135	25.49	12.12	85.4	3.09	109.57	***B. 41227**	**7.94**	
	C.P. 44 101	21.80	13.88	90.1	3.02	107.09	C.P. 44 101	7.90	
	D. 141/46	22.91	12.19	85.4	2.79	98.94	D. 141/46	7.48	
	B. 53348	19.64	13.99	86.6	2.75	97.52	B. 50135	6.62	
	B. 53200	21.31	12.41	86.9	2.71	96.10	B. 53200	6.13	
	B. 50347	20.61	12.14	86.3	2.50	88.65	B. 46364	4.70	
	B. 46364	17.97	12.67	90.1	2.28	80.85	B. 53348	4.55	
	Mean:				**2.82**	**100.00**			
	Significant Difference, 20 : 1 :				**.56**	**19.86**			

Results of First Ratoon Variety Trials on Pegassy Clay.

	Pln. Diamond, Field G.G. 15 L.S. Reaped 2.11.60 at 13.00 months. Rainfall:—89.62 inches.								
MEANS OF 5 PLOTS:	D. 141/46	52.63	15.76	89.6	8.29	132.43	D. 141/46	15.78	235
	B. 52107	46.45	15.44	88.5	7.17	114.54	B. 46364	13.10	
	B. 46364	40.46	14.99	91.2	6.06	96.81	B. 5277	12.34	
	B. 5213	44.16	13.65	88.1	6.03	96.33	B. 5213	12.25	
	***B. 41227**	**41.33**	**14.56**	**88.7**	**6.01**	**96.01**	B. 52107	12.17	
	B. 5277	38.11	15.05	90.5	5.73	91.53	B. 52158	11.59	
	B. 52158	35.81	15.86	88.0	5.68	90.73	***B. 41227**	**11.42**	
	B. 52144	39.63	12.92	81.4	5.12	81.79	B. 52144	9.49	
	Mean:				**6.26**	**100.00**			
	Significant Difference, 20 : 1 :				**.87**	**13.90**			

***Standard Cane.**

TABLE III. (Contd.) —Results of First Ratoon Variety Trials on Pegassy Clay.

	Variety.	Cane per Acre, Tons.	Pol. % Cane.	Purity.	Sucrose in Cane per Acre. Tons.	Sucrose in Cane per Acre. % Mean.	Combined results for 2 Crops, Plants and 1st Ratoons. Variety.	Combined results for 2 Crops, Plants and 1st Ratoons. Sucrose in Cane per Acre. Tons.	Trial No.
Pln. Leonora, Field P.L. 53. Reaped 18.2.60 at 11.75 months. Rainfall :—63.08 inches.									
MEANS OF 5 PLOTS:	H. 38–2915	63.84	12.99	87.3	8.29	146.99	H. 38–2915	19.19	236
	***B. 41227**	**52.04**	**13.57**	**86.1**	**7.06**	**125.18**	***B. 41227**	**16.27**	
	H. 39–3633	51.38	12.44	84.4	6.39	113.30	H. 39–3633	14.10	
	H. 44–3098	51.28	12.18	84.1	6.25	110.82	H. 44–3098	12.87	
	H. 39–5803	41.16	12.98	86.8	5.34	94.68	H. 39–5803	12.26	
	Q. 50	37.48	11.46	80.9	4.30	76.24	Q. 57	9.53	
	H. 38–4443	38.33	9.83	74.9	3.77	66.84	Q. 50	7.81	
	Q. 57	30.51	12.09	83.2	3.69	65.43	H. 38–4443	7.21	
	Mean:				5.64	100.00			
	Significant Difference, 20: 1:				1.80	31.91			
Pln. Leonora, Field C.I. N.E. 6. Reaped 4.10.60 at 10.75 months. Rainfall:—84.00 inches.									
MEANS OF 5 PLOTS:	B. 50135	51.69	13.74	82.3	7.10	116.98	***B. 41227**	**14.73**	237
	***B. 41227**	**43.90**	**14.90**	**85.1**	**6.54**	**107.57**	B. 50275	13.83	
	B. 51116	45.96	14.19	85.9	6.52	107.24	B. 51116	13.79	
	B. 5277	42.24	14.27	83.4	6.03	99.18	B. 50135	13.30	
	B. 50347	45.37	12.87	80.8	5.84	96.05	B. 5277	13.12	
	B. 50275	38.27	14.56	87.6	5.57	91.61	B. 53200	12.42	
	B. 53218	46.40	11.98	75.2	5.56	91.45	B. 50347	11.92	
	B. 53200	43.94	12.51	79.3	5.50	90.46	B. 53218	10.59	
	Mean:				6.08	100.00			
	Significant Difference, 20: 1:				.81	13.32			
Pln. Non Pareil, Field 40 Strathspey. Reaped 2.8.60 at 11.50 months. Rainfall:—58.50 inches.									
MEANS OF 5 PLOTS:	C.P. 44–101	39.83	14.48	90.2	5.77	125.16	C.P. 44–101	9.75	238
	D. 26/52	35.57	14.62	91.2	5.20	112.89	D. 26/52	9.73	
	***B. 41227**	**37.95**	**11.86**	**86.4**	**4.50**	**97.61**	D. 39/46	9.06	
	D. 39/46	35.82	12.53	87.9	4.49	97.40	D.B. 44/55	8.58	
	D.B. 57/55	33.25	13.48	88.5	4.48	97.18	***B. 41227**	**8.33**	
	D.B. 44/55	32.04	13.65	88.0	4.37	94.79	D.B. 154/55	7.81	
	D.B. 13/55	36.85	11.20	83.1	4.13	89.59	D.B. 57/55	7.66	
	D.B. 154/55	34.64	11.42	84.4	3.96	85.90	D.B. 13/55	7.58	
	Mean :				4.61	100.00			
	Significant Difference, 20 : 1 :				.75	16.27			

*Standard Cane.

TABLE IV.—Results of Second Ratoon Variety Trials on Demerara Frontland Clay.

	Variety.	Cane per Acre, Tons.	Pol. % Cane.	Purity.	Sucrose in Cane per Acre.		Combined results for 3 Crops, Plants, 1st and 2nd Ratoons.		Trial No.
					Tons.	% Mean.	Variety.	Sucrose in Cane per Acre. Tons.	
	Sophia, Field 1 East "B". Reaped 17.3.60 at 11.25 months. Rainfall:—92.03 inches.								
MEANS OF 4 PLOTS:	***B. 41227**	**38.04**	**13.87**	**85.4**	**5.27**	**120.59**	***B. 41227**	**16.88**	200
	B. 5321	36.50	12.24	83.7	4.47	102.29	B. 51168	13.59	
	B. 51168	28.35	13.79	87.3	3.91	89.47	B. 5321	13.55	
	B. 52184	29.02	13.25	88.0	3.84	87.87	B. 52184	10.85	
	Mean:				4.37	100.00			
	Significant Difference, 20: 1:				.70	16.02			
	Sophia, Field 1 East "A". Reaped 19.3.60 at 11.25 months. Rainfall:—92.03 inches.								
MEANS OF 4 PLOTS:	B. 53227	40.24	15.36	86.4	6.24	117.96	B. 53227	18.77	201
	***B. 41227**	**37.66**	**15.24**	**87.3**	**5.74**	**108.51**	***B. 41227**	**18.15**	
	D. 39/46	45.37	12.66	86.0	5.74	108.51	D. 39/46	17.81	
	B. 5037	33.14	15.69	89.1	5.20	98.30	D. 18/52	16.47	
	B. 53348	36.15	14.23	84.3	5.14	97.16	B. 5037	15.44	
	D. 18/52	37.27	13.62	84.0	5.07	95.84	B. 53348	14.77	
	D. 11/52	27.87	14.11	87.0	3.93	74.29	D. 11/52	11.45	
	Mean:				5.29	100.00			
	Significant Difference, 20 : 1 :				.86	16.26			
	Sophia, Field 1 East "C". Reaped 17.3.60 at 11.25 months. Rainfall:—92.03 inches.								
MEANS OF 4 PLOTS:	B. 5213	37.75	13.09	81.2	4.94	125.70	D. 26/52	17.69	199
	D. 26/52	30.38	15.07	84.8	4.58	116.54	B. 53200	16.64	
	***B. 41227**	**32.42**	**13.81**	**82.6**	**4.48**	**113.99**	B. 52389	16.61	
	B. 52389	34.42	12.49	77.4	4.30	109.41	***B. 41227**	**16.22**	
	B. 53267	31.38	13.52	79.1	4.24	107.89	B. 53218	16.17	
	B. 53200	33.60	12.18	77.8	4.09	104.07	B. 5213	16.13	
	B. 53218	37.14	10.81	73.1	4.01	102.04	D. 18/52	15.43	
	B. 53348	30.83	12.14	76.0	3.74	95.17	B. 53267	14.21	
	D. 18/52	29.56	12.26	75.7	3.63	92.37	B. 53348	14.20	
	B. 5321	30.63	11.62	76.0	3.56	90.59	B. 5352	13.95	
	D. 8/52	28.98	11.79	78.1	3.42	87.02	D. 16/52	13.66	
	D. 16/52	26.95	11.85	77.2	3.19	81.17	B. 5321	13.29	
	B. 5352	31.89	9.30	69.0	2.96	75.32	D. 8/52	12.61	
	Mean:				3.93	100.00			
	Significant Difference, 20: 1:				.86	21.88			

* Standard Cane.

TABLE IV. (Contd.)—**Results of Second Ratoon Variety Trials on Demerara Frontland Clay.**

	Variety.	Cane per Acre, Tons.	Pol. % Cane.	Purity	Sucrose in Cane per Acre. Tons.	Sucrose in Cane per Acre. % Mean.	Combined results for 3 Crops, Plants 1st and 2nd Ratoons. Variety.	Combined results for 3 Crops, Plants 1st and 2nd Ratoons. Sucrose in Cane per Acre. Tons.	Trial No.
	Sophia, Field 7 West. Reaped 30.3.60 at 11.50 months.								
	Rainfall:—92.38 inches.								
MEANS OF 5 PLOTS:	***B. 41227**	**41.43**	**15.31**	**89.6**	6.34	127.31	***B. 41227**	**23.69**	198
	B. 53227	41.42	15.13	88.7	6.27	125.90	B. 53227	22.77	
	B. 53200	**38.99**	14.82	88.4	5.78	116.06	B. 53200	20.98	
	B. 53165	40.01	13.09	**84.6**	5.23	105.02	B. 53218	19.07	
	B. 53218	34.13	11.57	88.1	4.97	99.80	B. 53329	18.86	
	B. 53362	36.06	13.30	85.6	4.80	96.39	B. 53165	18.40	
	B. 53329	31.76	14.98	89.6	4.76	95.58	B. 53362	18.04	
	B. 53320	25.97	13.45	84.4	3.49	70.08	B. 53320	16.13	
	B. 53317	**19.31**	16.53	91.9	3.19	64.06	B. 53317	12.84	
	Mean:				4.98	100.00			
	Significant Difference; 20 : 1:				.78	15.66			
	Sophia, Field 12 East "B". Reaped 9.8.60 at 11.50 months.								
	Rainfall:—94.96 inches.								
MEANS OF 5 PLOTS:	B. 50267	44.67	14.10	89.3	6.30	123.77	B. 50267	21.71	202
	B. 50135	**39.43**	14.54	88.9	5.73	112.57	B. 50135	21.61	
	***B. 41227**	**38.89**	**14.63**	**89.3**	**5.69**	**111.79**	***B. 41227**	**20.39**	
	B. 51131	35.14	15.58	91.7	5.47	107.47	B. 51116	20.13	
	B. 51116	37.14	14.66	91.2	5.45	107.07	B. 51131	19.35	
	H. 38-2915	37.01	14.64	91.2	5.42	106.48	B. 50377	18.91	
	H. 44-3098	35.68	13.98	88.9	4.99	98.04	H. 38-2915	18.59	
	B. 5037	32.03	15.36	90.4	4.92	96.66	H. 39-5803	17.57	
	H. 39-5803	31.41	15.28	90.7	4.80	94.30	B. 5037	17.00	
	H. 39-3633	35.61	13.39	88.6	4.77	93.71	H. 44-3098	16.98	
	H. 38-4443	34.47	13.08	88.3	4.51	88.61	B. 51192	16.55	
	H. 39-7028	**31.60**	14.23	91.0	4.50	88.41	H. 39-7028	16.16	
	B. 50377	31.49	14.04	88.8	4.42	86.84	H. 39-3633	15.87	
	B. 51192	31.81	13.47	89.2	4.29	84.28	H. 38-4443	15.41	
	Mean:				5.09	100.00			
	Significant Difference, 20 : 1 :				1.08	21.22			
	Sophia, Field 5 West "C." Reaped 20.9.60 at 10.25 months.								
	Rainfall:—91.07 inches.								
MEANS OF 5 PLOTS:	B. 51131	37.75	15.30	89.5	5.78	128.16	B. 51131	20.05	204
	***B. 41227**	**35.57**	**14.35**	**89.8**	**5.10**	**113.08**	***B. 41227**	**19.16**	
	B. 51134	35.65	14.31	87.9	5.10	113.08	C.P. 44 101	18.22	
	C.P. 44 101	34.52	14.77	89.6	**5.10**	113.08	B. 51134	18.15	
	H. 39-5803	25.85	14.95	90.7	3.86	85.59	Q. 57	14.09	
	Q. 57	24.32	14.44	88.6	3.51	77.83	H. 39-5803	13.68	
	P.R. 905	22.05	14.21	89.0	3.13	69.40	P.R. 905	12.25	
	Mean:				4.51	100.00			
	Significant Difference, 20 : 1 :				1.14	25.28			

*** Standard Cane.**

TABLE IV (Contd.)—Results of Second Ratoon Variety Trials on Demerara Frontland Clay.

	Variety.	Cane. per Acre, Tons.	Pol. % Cane	Purity.	Sucrose in Cane per Acre. Tons.	Sucrose in Cane per Acre. % Mean.	Combined results for 3 Crops, Plants, 1st and 2nd Ratoons. Variety.	Sucrose in Cane, per Acre Tons.	Trial No.
	Sophia, Field 5 West "A". Reaped 22.9.60 at 10.25 months. Rainfall :—90.60 inches.								
MEANS OF 5 PLOTS:	D.B. 255/53	37.30	15.19	91.4	5.66	120.68	***B. 41227**	**19.79**	205
	B. 53200	37.45	14.35	87.3	5.37	114.50	B. 53200	19.15	
	***B. 41227**	**36.05**	**14.53**	**86.9**	**5.24**	**111.73**	D.B. 255/53	18.70	
	B. 5213	37.35	13.12	86.1	4.90	104.48	B. 5213	17.91	
	B. 53267	32.11	15.01	91.0	4.82	102.77	D.B. 169/53	17.88	
	H. 39-3633	35.77	13.33	86.8	4.77	101.71	B. 5212	17.62	
	B. 52144	33.22	13.88	85.2	4.61	98.29	B. 52144	17.34	
	B. 5212	30.14	14.92	87.5	4.50	95.95	B. 53267	16.75	
	P.R. 1000	28.36	14.74	90.1	4.18	89.13	H. 39-3633	16.68	
	B. 53365	26.72	15.31	88.2	4.09	87.21	B. 53365	14.85	
	D.B. 169/53	22.54	15.31	91.9	3.45	73.56	P.R. 1000	13.92	
	Mean:				4.69	100.00			
	Significant Difference, 20: 1:				.69	14.71			
	Pln. Lusignan, Field 39 E. Reaped 30.9.60 at 11.25 months. Rainfall :—75.21 inches.								
MEANS OF 5 PLOTS:	D. 141/46	42.99	15.91	87.5	6.84	130.29	**D. 141/46**	**21.71**	206
	D. 49/46	43.21	14.04	84.6	6.07	115.62	D. 49/46	19.73	
	B. 51131	36.73	15.14	87.5	5.56	105.90	B. 51131	17.90	
	***B. 41227**	**36.80**	**13.92**	**83.4**	**5.12**	**97.52**	***B. 41227**	**17.85**	
	D. 133/46	35.69	13.75	83.0	4.91	93.52	D. 133/46	17.14	
	B. 46364	37.39	12.50	82.3	4.67	88.95	H. 38-2915	16.16	
	H. 38-2915	35.64	12.65	84.9	4.51	85.90	B. 46364	15.89	
	H. 38-4443	31.52	13.62	84.5	4.29	81.71	H. 38-4443	13.44	
	Mean :				5.25	100.00			
	Significant Difference, 20 : 1 :				.72	13.71			
	Pln. Ogle, Field T.K.E. 29. Reaped 31.8.60 at 11.50 months. Rainfall :—91.05 inches.								
MEANS OF 5 PLOTS:	B. 53362	39.82	14.49	88.9	5.77	116.33	***B. 41227**	**19.20**	207
	***B. 41227**	**41.99**	**13.53**	**89.3**	**5.68**	**114.52**	B. 53261	16.80	
	B. 53355	33.16	15.78	91.5	5.23	105.44	B. 53362	16.08	
	B. 53261	36.67	14.13	88.3	5.18	104.44	B. 53329	15.99	
	B. 53329	34.37	14.20	89.1	4.88	98.39	B. 53355	15.68	
	B. 53320	30.72	14.14	88.6	4.34	87.50	B. 53317	15.50	
	B. 53317	28.95	14.93	90.5	4.32	87.10	B. 53320	14.42	
	B. 5398	30.52	14.08	88.8	4.30	86.69	B. 5398	13.70	
	Mean :				4.96	100.00			
	Significant Difference, 20 : 1 :				.87	17.54			

***Standard Cane.**

TABLE IV. (Contd.)—Results of Second Ratoon Variety Trials on Berbice Frontland Clay.

	Variety.	Cane per Acre, Tons.	Pol. % Cane.	Purity.	Sucrose in Cane per Acre. Tons.	Sucrose in Cane per Acre. % Mean.	Combined results for 3 Crops, Plants 1st and 2nd Ratoons. Variety.	Combined results for 3 Crops, Plants 1st and 2nd Ratoons. Sucrose in Cane per Acre. Tons.	Trial No.
Pln. Port Mourant, Field T.L.E. 12. Reaped 16.8.60 at 12.25 months. Rainfall :—46.59 inches.									
MEANS OF 5 PLOTS:	B. 51116	41.11	13.80	87.2	5.68	124.84	B. 51116	19.79	208
	D. 184/46	32.10	15.61	90.9	5.01	110.11	D. 184/46	15.65	
	B. 52178	35.65	14.08	88.7	4.93	108.35	B. 41227	**15.03**	
	***B. 41227**	**31.93**	**14.28**	**88.0**	**4.56**	**100.22**	B. 51131	13.74	
	B. 46364	30.90	14.21	88.1	4.39	96.18	B. 46364	13.22	
	D. 39/46	32.41	12.92	88.6	4.19	92.09	B. 52178	11.69	
	B. 51131	29.08	14.34	87.6	4.17	91.65	D. 39/46	9.37	
	H. 44-3098	25.66	13.46	86.8	3.45	75.82	H. 44-3098	9.23	
	Mean:				4.55	100.00			
	Significant Difference, 20:1:				.67	14.73			
Pln. Rose Hall, Field Smithson 10. Reaped 6.10.60 at 12.00 months. Rainfall:—77.95 inches.									
MEANS OF 5 PLOTS:	***B. 41227**	**29.94**	**15.24**	**88.6**	**4.56**	**116.92**	***B. 41227**	**15.66**	209
	B. 52178	30.03	14.90	87.5	4.47	114.62	C.P. 44-101	15.20	
	C.P. 44-101	29.42	14.27	87.7	4.20	107.69	B. 52178	14.37	
	B. 5178	31.27	13.39	84.1	4.19	107.44	H. 39-7028	14.06	
	H. 39-7028	26.82	13.84	87.0	3.71	95.13	B. 5178	13.60	
	B. 50184	23.50	15.09	89.0	3.55	91.03	B. 50184	12.57	
	H. 44-3098	25.00	13.07	84.1	3.27	83.85	D. 44/52	11.75	
	D. 44/52	21.38	15.06	86.2	3.22	82.56	H. 44-3098	11.42	
	Mean:				3.90	100.00			
	Significant Difference, 20: 1:				.49	12.56			

Results of Second Ratoon Variety Trials on Pegassy Clay.

Pln. Diamond, Field 111/52. Reaped 3.11.60 at 12.00 months. Rainfall:—94.72 inches.

MEANS OF 5 PLOTS:	B. 50347	38.13	13.95	87.8	5.32	116.16	B. 51131	19.37	21
	***B. 41227**	**35.53**	**14.86**	**88.8**	**5.28**	**115.28**	***B. 41227**	**19.05**	
	B. 51131	33.53	15.40	88.2	5.16	112.66	B. 50135	18.32	
	B. 50135	33.93	14.91	89.6	5.06	110.48	B. 50347	18.24	
	B. 51134	32.08	14.41	87.1	4.62	100.87	B. 51134	17.20	
	B. 5124	27.43	16.15	91.6	4.43	96.72	B. 5124	16.95	
	B. 50275	27.95	14.13	89.6	3.95	86.24	B. 50275	15.01	
	B. 51211	24.19	11.68	87.0	2.82	61.57	B. 51211	11.56	
	Mean :				4.58	100.00			
	Significant Difference, 20: 1:				.67	14.63			

*** Standard Cane.**

TABLE IV. (Contd.) —**Results of Second Ratoon Variety Trials on Pegassy Clay.**

	Variety.	Cane per Acre, Tons.	Pol. % Cane.	Purity.	Sucrose in Cane per Acre.		Combined results for 3 Crops, Plants, 1st and 2nd Ratoons.		Trial No.
					Tons.	% Mean.	Variety.	Sucrose in Cane per Acre, Tons.	
	Pln. Blairmont, Field H.P. 3 L.S. Reaped 12.10.60 at 11.50 months.								
	Rainfall:—73.93 inches.								
ANS OF 5 LOTS.	***B. 41227**	**39.96**	**16.89**	**88.1**	**6.75**	**115.78**	***B. 41227**	**21.64**	210
	D. 184/46	37.54	16.94	89.6	6.36	109.09	D. 184/46	20.04	
	B. 5178	46.41	13.31	80.5	6.18	106.00	B. 5178	18.44	
	B. 52178	39.34	15.60	87.8	6.14	105.32	B. 52178	17.31	
	B. 51183	43.07	13.99	83.5	6.03	103.43	B. 51183	17.01	
	Q. 50	36.43	15.37	87.6	5.60	96.05	Q. 50	15.72	
	Q. 28	32.51	15.53	89.9	5.05	86.62	Q. 28	13.99	
	H. 38-4443	33.44	13.54	83.9	4.53	77.70	H. 38-4443	13.02	
	Mean:				5.83	100.00			
	Significant Difference, 20 :1 :				1.01	17.32			
	Pln. Diamond, Field 26 W.G.G. Reaped 10.2.60 at 11.75 months.								
	Rainfall:—85.89 inches.								
	B. 49119	34.91	13.96	89.3	4.87	127.49	B. 5277	14.21	
	B. 5277	29.00	15.11	90.9	4.38	114.66	***B. 41227**	**14.01**	
NS OF 5	***B. 41227**	**31.79**	**13.51**	**88.0**	**4.30**	**112.57**	B. 49119	13.59	
LOTS:	B. 52222	28.81	13.22	87.4	3.81	99.74	B. 52371	12.11	211
	B. 52257	26.79	13.95	86.6	3.73	97.64	B. 52222	12.00	
	B. 52371	25.70	14.27	88.2	3.67	96.07	B. 52257	11.96	
	P.R. 1000	24.32	12.85	87.9	3.12	81.68	B. 52253	9.94	
	B. 52253	22.33	11.91	83.2	2.66	69.63	P.R. 1000	9.29	
	Mean :				3.82	100.00			
	Significant Difference, 20 : 1 :				1.07	28.01			

andard Cane.

VARIETY PERFORMANCE SUMMARY.

The performance of the better varieties of each series will be discussed separately. The performance of certain foreign varieties, under British Guiana conditions, will also be discussed.

(i) **Varieties produced in 1950.**

Barbados 1950 series.

B. 50135 (B. 38212 x B. 4098).

Trial Nos. : 202, 212, 221, 229, 234, 237, 258, 260, 261.

This variety has now been reaped in seventeen experiments as plants and has beaten the standard variety on seven occasions not one of which has been by a significant margin. It has itself been beaten by the standard variety on ten occasions, one being by a significant margin.

Thirteen first ratoon experiments have now been reaped in which B. 50135 has been included and it has beaten the standard variety on seven occasions, once significantly. It has been beaten by the standard variety on six occasions, once significantly.

In the nine experiments reaped to date as second ratoons B. 50135 has beaten the standard five times and has itself been beaten on four occasions. In none of these trials has there been a significant margin of difference.

As noted previously B .50135 performs moderately well on frontland clay but tends to perform badly on both pegasse and riverside clay. It possesses an Available Pol. % Cane which tends to be generally lower than that of B. 41227 and it is rated as being resistant to leaf scald disease.

B. 50135 will not be included in any more experiments but is being tested on a small scale on the estates.

B. 50275, (B.37161 x B.4098).

Trial Nos. : 212, 225, 237, 254, 268.

Under British Guiana conditions B. 50275 gives good yields of cane but its juice is of poor quality.

This variety has been reaped in ten experiments as plants beating the standard variety on five occasions and being itself beaten on five occasions by the standard variety.

In eight reapings as first ratoons B. 41227 has beaten this variety on all but two occasions two being by significant margins.

In six reapings as second ratoons B. 50275 has beaten the standard variety on two occasions by non-significant margins and has itself been beaten on four occasions, twice significantly.

B. 50275 will not be tested in any further experiments since, due to its poor juice quality, it cannot be considered worthy of commercial planting.

This variety is rated as being susceptible/tolerant to leaf scald disease.

B. 50347. (B. 4362 x B. 4098).

Trial Nos. : 212, 228, 229, 232, 234, 237.

B. 50347 suffers from the fact that while being good in yield of cane its juice quality is very poor. The performance of this variety on pegasse is poor and while yields of sugar per acre on clays have been comparable with B. 41227 the tons cane per ton of sugar ratio is high.

Twelve plant reapings have been made in which B. 50347 has beaten the standard on six occasions, once significantly. It has been beaten on six occasions by B. 41227 three of which have been by significant margins.

Twelve trials have been reaped as first ratoons in which the standard variety has been beaten on four occasions and the standard variety has beaten B. 50347 on eight occasions two of which have been by significant margins.

In the seven second ratoon reapings the standard variety has been surpassed on four occasions and has beaten B. 50347 in the remaining three trials. None of the margins have been significant.

B. 50347 is rated as being tolerant to leaf scald disease.

(ii) **Varieties produced in 1951.**

Barbados 1951 series.

B. 51116, (B. 4362 x B. 34104).

Trial Nos : 202, 208, 225, 232, 237, 259.

B. 51116 has been reaped in eleven trials as plants and has outyielded the standard on five occasions, once significantly. In the six trials in which it has been beaten by the standard variety one has been by a significant margin.

Nine first ratoon trials have been reaped in two of which the standard variety has been outyielded by B.51116, once by a significant margin. B.51116 was beaten by B.41227 by small margins on the other seven occasions.

In the six second ratoon reapings the standard variety has been beaten on three occasions, once significantly, and B.51116 has been outyielded by the standard variety on the other three occasions, none by significant margins.

B. 51116 is, on the average nearly the equal of B. 41227 as plants and slightly superior to it as both first and second ratoons. From the experiment results it would appear that B.51116 is generally the equal of B.41227 on all soil types and possesses juice of average quality.

B. 51116 is rated as being susceptible/tolerant to leaf scald disease.

B. 51131. (B. 45170 x B. 41227).

Trial Nos. 202, 204, 206, 208, 212, 229, 253, 258, 260.

In the fourteen plant cane trials reaped B. 51131 has outyielded B. 41227 on four occasions, once significantly, while it has itself been outyielded by B. 41227 on ten occasions, once significantly.

As first ratoons in the ten reapings to date B. 51131 has outyielded the standard variety on four occasions, once significantly. On the six occasions when it was outyielded by B. 41227 one was by a significant margin.

In the nine second ratoon reapings five have been in favour of B. 51131, once significantly and four in favour of B. 41227.

Therefore, from the results of the experiments reaped to date B. 51131 appears to be slightly inferior in yield to B. 41227 both as plants and ratoons. While its juice is, in general, above average its yield of cane is slightly inferior to that of the standard variety.

B. 51131 is rated as being resistant to leaf scald disease.

(iii). **Varieties produced in 1952.**

(a) **Barbados 1952 series.**

B. 5277. (B. 37161 x B. 42231).

Trial Nos. : 196, 211, 219, 227, 232, 235, 237, 266, 267.

This variety has been reaped in eleven trials as plants outyielding the standard variety on three occasions, once by a significant margin. It has been beaten eight times by B. 41227, in only one case, again, was the margin significant.

In the nine trials reaped as first ratoons B. 5277 has not once outyielded the standard variety while B. 41227 though outyielding B.5277 in each case did not do so by a significant margin.

Both B. 5277 and B. 41227 have each come out on top in two of the four reapings as second ratoons but the standard variety significantly outyielded B. 5277 on one occasion.

As plants B. 5277 showed some promise but ratoon results are consistently disappointing. Its performance on pegasse lands has, however, been very erratic. B. 5277 possesses a juice quality, in general, slightly below average and is rated as being resistant to leaf scald disease.

B. 52107. (B. 4145 x B. 41227).

Trial Nos. : 196, 227, 235, 248, 264.

This variety has not performed well as plants and in the seven experiments reaped as plants it has been beaten by B. 41227 on each occasion three of them being by significant margins.

As first ratoons, in the five experiments reaped to date, B.52107 has beaten the standard variety on three occasions. once by a significant margin. While B.41227 outyielded it on two occasions neither was by a significant margin.

B. 52107 has significantly outyielded the standard variety once and been beaten twice, though not by significant margins, in the three second ratoon experiments reaped to date.

B. 52107 has a very poor Available Pol. % Cane as plants but as ratoons it is above average.

From the results of the experiments reaped to date B. 52107 has shown itself to be capable of poor yields as plant cane but is a very strong ratooner.

This variety is rated as being resistant to leaf scald disease.

B. 52315. (Co. 421 x B. 41227).

Trial Nos. 196, 215, 264.

B. 52315 has been reaped on five occasions as plants, in two of which it has outyielded the standard variety and has itself been outyielded by B. 41227 on three occasions, once by a significant margin.

In four reapings as first ratoons B. 52315 has outyielded the standard variety on two occasions while in the two experiments in which it was beaten by B. 41227 the margins of difference were statistically significant.

As second ratoons B. 52315 has outyielded the standard variety by a significant margin in one experiment and has been outyielded by B.41227 in the other two experiments, once significantly.

The performance of this variety in the experiments reaped to date has not been impressive—it has shown itself to be a very inconsistent yielder. B. 52315 possesses juice of poor quality and is rated as being resistant to leaf scald disease.

(b) **Demerara 1952 Series.**

D. 26/52. (B. 4362 x D. 20/46).

Trial Nos. : 199, 216, 238, 244, 253, 254, 256, 258, 259, 262, 265, 267.

Out of the fifteen plant cane experiments reaped D.26/52 has outyielded the standard variety on nine occasions, twice by significant margins. It has been beaten by B. 41227 on six occasions but only once by a significant margin.

In five trials as first ratoons the standard variety was outyielded in three once by a significant margin and D.26/52 was beaten on two occasions.

As second ratoons D.26/52 beat B. 41227 on two occasions and was itself beaten once, in neither case was the difference significant.

D.26/52 possesses a juice which is consistently of high quality and shows promise as a commercial variety.

(iv) **Varieties produced in 1953.**

(a) **Barbados 1953 Series.**

B. 53200. (Co. 421 x B. 41211)

Trial Nos. : 192, 197, 198, 199, 205, 228, 234, 237, 259, 261.

The two further trials reaped as plants confirm that B. 53200 is definitely inferior to B. 41227. In the ten trials reaped as plants B. 53200 has only beaten the standard variety by a small margin in one trial and has been beaten on the other nine occasions, twice by significant margins.

In eight trials reaped as first ratoons this variety has beaten B. 41227 on only one occasion but it was by a significant margin. The standard variety has beaten it on the other seven occasions three of them being by significant margins.

As second ratoons a similar picture is presented with B. 53200 being slightly superior in one experiment and being outyielded in the other four, once by a significant margin.

As noted in a previous Bulletin B.53200 does not perform well enough for it to be ranked as a commercial variety in British Guiana. Its juice is of a consistently poor quality and though attractive in growth characteristics its yield of cane does not make up for this poor juice quality.

B.53200 is rated as being tolerant to leaf scald disease.

B.53218, (B.3439 x B.45151).

Trial Nos. : 191, 197, 198, 199, 223, 237, 261.

B.53218 has been reaped in seven plant cane trials and though having beaten B.41227 on three occasions these have been by narrow margins. On the four occasions when it was beaten by the standard variety three were by significant margins.

In the six trials reaped as first ratoons B.53218 has beaten the standard variety on one occasion by a small margin and has been beaten by B.41227 on the five other occasions, three times by significant margins.

As second ratoons B.53218 has been beaten by B.41227 on three occasions, once significantly, and has beaten the standard variety on one occasion.

This variety has proved to be a very erratic performer—both its best and its worst performance has been on pegassy clay. Its juice quality has been consistently poor.

B.53218 is rated as being resistant to leaf scald disease.

B.53227, (B.37161 x B.4098).

Trial Nos. : 192, 197, 198, 201, 225, 232, 253, 256, 261, 262, 265.

B.53227 has been reaped in twelve experiments as plants and has beaten the standard variety in yield on five occasions. It has been beaten seven times by the standard variety, B.41227 having outyielded it by significant margins on two occasions. It is interesting to note that B.53227 was significantly outyielded on each occasion on riverside clay.

As first ratoons B.53227 has been beaten on one occasion by the standard variety and has proved superior to B.41227 on the other five occasions. In no instance has the difference in yield between B.53227 and B.41227 attained significance in this cycle.

In the four trials as second ratoons B.53227 has beaten the standard variety on one occasion and has been beaten by it on the other three occasions. Again in no instance was the margin of difference significant.

Under British Guiana conditions B.53227 is the most promising variety of the Barbados 1953 series. It appears, from these experiments, to perform badly on riverside clays while its performance on pegasse is rather erratic. Its Available Pol. % Cane is equal to that of B.41227 as plants and better than it as ratoons.

B.53227 is rated as being resistant to leaf scald disease.

(b) **Demerara/Barbados 1953 series.**

D.B. 169/53, (B.4362 x B.4098).

Trial Nos. : 205, 219, 225, 260, 261.

D.B.169/53 appears to have inherited the good juice characteristics of its "mother"—B.4362. Its juice, in the experiments reaped, has consistently been of high quality.

As plants this variety has been reaped in eight experiments and has beaten the standard variety in yield on only one occasion while on the seven occasions when it was beaten by B.41227 three were by significant margins.

D.B.169/53 has been reaped on six occasions as first ratoons and has been beaten by the standard variety on each occasion, five times by statistically significant differences.

In the four trials in which it has been reaped as second ratoons it has again failed to surpass the standard variety in yield while in three of these trials the differences in yield between it and the standard have been statistically significant.

Despite the fact that D.B.169/53 possesses an excellent Available Pol. % Cane it is definitely inferior to B.41227 in yield and has no prospect of becoming a commercial variety in British Guiana.

(v) **Varieties produced in 1954.**

(a) **Barbados 1954 series.**

B.5490, (B.37172 x B.46397).

Trial Nos. : 213, 214, 222, 249, 253, 268.

This variety has been reaped in six trials as plants and has outyielded the standard variety on three occasions, once significantly. On the three occasions when it was outyielded by the standard variety one was by a significant margin.

As first ratoons B.5490 outyielded the standard variety in all three experiments reaped in this cycle. In one experiment the difference in yield between this variety and B.41227 was statistically significant.

No second ratoon trials have yet been reaped which include B.5490.

This variety shows some promise and has an Available Pol. % Cane higher than average.

B.5490 is rated as being resistant to leaf scald disease.

B.54142, (B.44341 x B.3337).

Trial Nos. : 213, 214, 222, 253.

B.54142 is expected to become a commercial variety in Barbados. It shows promise under British Guiana conditions but unfortunately it has been rated as being susceptible to leaf scald disease. However, since no field symptoms of leaf scald have been observed in it and since it shows definite promise it will be tested further in British Guiana.

In the four experiments in which B.54142 has been reaped as plants it has outyielded B.41227 on two occasions and on both occasions by significant margins. In the two experiments in which it was beaten by B.41227 one was by a statistically significant margin.

As first ratoons B.54142 has outyielded the standard variety by significant margins on two occasions and has itself been beaten once by a small margin.

B.54262, (B.4362 x B.4098).

Trial Nos. : 213, 214, 222, 253, 265.

B.54262 has been reaped in five trials as plants and has beaten the standard variety on two occasions, once significantly. B.41227 has outyielded it on the other three occasions one being by a significant margin.

As first ratoons B.54262 has beaten B.41227 on two occasions, both by significant margins, and has itself been outyielded by the standard variety by a small difference in the other one trial.

B.54262 has performed very erratically on pegassy clay in the plant cane cycle. It has an Available Pol. % Cane of below average quality as plants but slightly above average as first ratoons.

B.54262 is rated as being resistant to leaf scald disease and will be tested in further trials.

B.54277, (B.44341 x B.3337).

Trial Nos. : 213, 214, 222, 249, 253, 256, 268.

B.54277 is of the same parentage as B.54142 and has been reaped in seven trials as plants. It has beaten B.41227 in yield on five occasions, twice significantly, and on two occasions when it was outyielded by the standard variety the margins of difference were not statistically significant.

In three reapings as first ratoons the standard variety has been outyielded twice, once significantly, while B.54277 was beaten by a small margin on the other ocassion.

B.54277 has an Available Pol. % Cane well above average and is rated as being resistant to leaf scald disease.

This variety has shown promise in the trials reaped to date but more reapings on a wider range of soil types, and particularly as ratoons, are required before any definite recommendations can be made as to its commercial possibilities.

(b) **Demerara-Barbados 1954 series.**

D.B.9/54, (B.46103 x B.41227).

Trial Nos. : 194, 224, 249.

In the three trials reaped as plants D.B.9/54 has beaten the standard variety on each occasion, once significantly.

In the two trials reaped as first ratoons the honours are even while in the one trial reaped as second ratoons it was outyielded by B.41227 by a significant margin.

While outyielding the standard variety, D.B.9/54 has an Available Pol. % Cane which is generally well below that of B.41227.

D.B.125/54, (P.R.1000 x B.41227).

Trial Nos. : 193, 224, 249.

D.B.125/54 is the best variety in the Demerara-Barbados 1954 series and has been reaped in three trials as plants. In these three trials it has outyielded the standard variety on each occasion while the margins of difference have not quite attained significance.

As first ratoons D.B.125/54 has outyielded the standard variety on one occasion by a significant margin while it was outyielded by B.41227 on the other occasion by a negligible amount.

In the one second ratoon trial reaped D.B.125/54 has again outyielded the standard variety though the margin of difference did not attain significance.

D.B.125/54 possesses an Available Pol. % Cane which is above average in quality and shows promise in the trials in which it has so far been reaped.

(c) **Demerara 1954 series.**

D.50/54, (Diamond 10 x D.62/43).

Trial Nos. : 194, 218, 223, 224, 228, 248, 253, 267.

D.50/54 has been reaped in eight trials as plants and has beaten the standard variety on one occasion. In the other seven trials it was outyielded by B.41227, once by a significant margin.

As first ratoons D.50/54 has been reaped on five occasions and has been outyielded in every trial by the standard variety, twice by significant margins.

In the one trial reaped as second ratoons D.50/54 was outyielded by B.41227.

Despite the fact that D.50/54 is the better of the Demerara 1954 series it does not appear to be worthy of further trial. Its Available Pol. % Cane is of low quality and it is extremely unlikely that it will merit planting on the commercial scale.

Varieties of Other Countries.

(a) **Hawaii.**

H.38-2915, (?)

Trial Nos. : 202, 206, 223, 228, 232, 236, 256, 262.

H.38-2915 has been reaped in ten trials as plants and has outyielded the standard variety on five occasions one being by a significant margin. It was outyielded by B.41227 on the other five occasions—three of them being by significant margins.

In the eight first ratoon trials reaped H.38-2915 has been beaten by B.41227 on six occasions — three of them significantly. On the two occasions when H.38-2915 outyielded B.41227 one was by a significant margin.

Three trials have been reaped as second ratoons in one of which H.38-2915 has outyielded the standard variety and has itself been outyielded in the other two.

H.38-2915 is rated as being susceptible to leaf scald disease and under British Guiana conditions, is the better of the Hawaiian varieties so far tested. However, it is clear from these experiments that in general it is inferior to B.41227. Its comparatively poor juice quality and its susceptibility to leaf scald disease make it unsuitable for planting on the commercial scale in British Guiana. However, in view of the results of a trial it has been tried on a small scale on one estate with satisfactory yields.

H.44-3098, (H.32-8560 x ?)

Trial Nos. : 202, 208, 209, 221, 225, 227, 236, 251.

H.44-3098, despite the fact that it looks vigorous in its early stages of growth has performed very poorly in all the trials in which it has been planted. In ten plant cane reapings it has been outyielded by B.41227 on each occasion —seven of them being by significant margins.

In nine reapings as first ratoons it was beaten on every occasion—six being by significant margins and in four reapings as second ratoons it has again been outyielded on every occasion—three times by significant margins.

H.44-3098 possesses juice of poor quality and is tolerant to leaf scald disease. It will not be tested any further since it is obviously unsuited to British Guiana conditions.

(b) **United States of America (Canal Point, Florida).**

C.P.44-101.

Trial Nos. : 204, 209, 219, 223, 228, 234, 238, 258.

This variety has been reaped in eleven trials as plants and has beaten the standard variety on five occasions, once by a significant margin. Of the six occasions on which C.P.44-101 was outyielded by B.41227 two were by significant margins.

In nine reapings as first ratoons C.P.44-101 has outyielded B.41227 on three occasions, once significantly, and has itself been outyielded by the standard variety on the other six occasions in three of which the differences were statistically significant.

In the two trials reaped as second ratoons C.P.44-101 has equalled the yield of B.41227 in one and has been beaten by it in the other one, though by a small margin of difference.

C.P.44-101 possesses a juice which is above average in quality as plants but slightly below as ratoons. As noted in a previous report C.P.44-101 appears to perform best when reaped in the Autumn crop—this is probably due to the fact that, under British Guiana conditions, this variety tends to flower very heavily during October and November. It generally produces stalks which are very thin in diameter and does not possess very attractive field characteristics.

Position of the Other Series.

Barbados 1955 Series.

Eighteen varieties of this series were placed in the sorting trials at Sophia during 1959. After reaping during 1960 not one of these varieties showed sufficient promise to be worthy of further trial. However, the results of another sorting trial on pegassy clay are awaited before a final decision is taken to discard this series.

Demerara-Barbados 1955 Series.

Twelve varieties were selected from this series on the basis of the results of the sorting trials. From the results of further trials reaped only **D.B.5/55, D.B.9/55 and D.B.162/55** will be tested further.

Demerara 1955 Series.

Only two varieties have shown any promise in the experiments, containing members of this series, which have been reaped to date. They are **D.249/55** and **D.278/55.**

Barbados 1956 Series.

The four members of this series **B.5660, B.5686, B.5695** and **B.56102** were placed in trials in 1960 and the first reaping will not be made until 1961.

Demerara-Barbados 1956 Series.

From the results of the sorting trials reaped at Sophia in 1960 only two varieties appear worthy of further trial. A sorting trial has still to be reaped on pegassy clay, after which other varieties may be selected for future testing.

Demerara 1956 Series.

Only five varieties constitute this series and they have all performed poorly in the trials which have been reaped up to the end of 1960.

Barbados 1957 Series.

The first sorting trials at Sophia were reaped during 1960 and thirteen varieties of this series have been selected for further trial. In some cases high yields were recorded relative to the standard variety—B.41227.

Demerara 1957 Series.

Fourteen varieties of this series were placed in sorting trials during 1960.

Barbados 1958 Series.

Sixty varieties of this series were placed in sorting trials during 1960.

GENERAL SUMMARY AND RECOMMENDATIONS.

The two standard varieties—B.41227 and B.37161—continue to perform satisfactorily on the commercial scale and as "general purpose" varieties are difficult to surpass under British Guiana conditions. Considering that B.37161 was bred in 1935 and B.41227 in 1939 it will be realised that these two varieties have, for varieties of sugar cane, been in commercial existence for a very long time. Even though these varieties have not yet shown any signs of real deterioration in British Guiana the need for superior varieties and also for varieties which could replace them if an emergency arose is strongly felt.

From the series which have been fully tested in British Guiana no definitely superior variety which satisfies all our commercial requirements has yet been

found. One or two, such as B.50135 and B.51116, could be used as replacements but the search is still continuing and always will continue for better varieties.

(a) **Barbados Varieties.**

The performance of the varieties produced in Barbados and discussed earlier is summarized in Table V.

B.53227 has shown some promise, particularly as ratoons. It is recommended that this variety be tried on the sugar estates on a small scale. Its performance in the trials suggests that this variety is not suited to riverside clays and pegassy clays.

The three Barbados varieties B.5190, B.54142 and B.54277 have shown promise in the trials in which they have been reaped. However, further reapings, particularly as ratoons, are required before any definite recommendations can be made. It is unfortunate that B.54142, which is expected to become a commercial variety in Barbados, is rated as being susceptible to leaf scald disease in British Guiana.

TABLE V.

Variety.	Parentage.	Plants.					Ratoons.				
		A.	B.	C.	D.	E.	A.	B.	C.	D.	E.
B. 50135	B. 38212 x B. 4098	7	0	9	1	17	11	1	9	1	22
B. 50275	B. 37161 x B. 4098	5	0	5	0	10	6	2	4	2	14
B. 50347	B. 4362 x B. 4098	5	1	3	3	12	8	0	9	2	19
B. 51116	B. 4362 x B. 34104	4	1	5	1	11	3	2	10	0	15
B. 51131	B. 45170 x B. 41227	3	1	9	1	14	7	2	9	1	19
B. 5277	B. 37161 x B. 42231	2	1	7	1	11	2	0	10	1	13
B. 52107	B. 4145 x B. 41227	0	0	4	3	7	3	1	4	0	8
B. 52315	Co. 421 x B. 41227	2	0	2	1	5	2	1	3	1	7
B. 53200	Co. 421 x B. 41211	1	0	7	2	10	1	1	7	4	13
B. 53218	B. 3439 x B. 45151	3	0	1	3	7	2	0	4	4	10
B. 53227	B. 37161 x B. 4098	5	0	5	2	12	6	0	4	0	10
B. 5490	B. 37172 x B. 46397	2	1	2	1	6	2	1	0	0	3
B. 54142	B. 44341 x B. 3337	0	2	1	1	4	0	2	1	0	3
B. 54262	B. 4362 x B. 4098	1	1	2	1	5	0	2	1	0	3
B. 54277	B. 44341 x B. 3337	3	2	2	0	7	1	1	1	0	3

LEGEND.

A. : Beat Standard Variety.
B. : Beat Standard Variety Significantly.
C. : Beaten by Standard Variety.
D. : Significantly Beaten by Standard Variety.
E. : Number of Trials Reaped.

(b) **Demerara-Barbados Varieties.**

The performance of the better Demerara-Barbados varieties is summarized in Table VI.

TABLE VI.

Variety.	Parentage.	Plants.					Ratoons.				
		A.	B.	C.	D.	E.	A.	B.	C.	D.	E.
D.B. 169/53	B. 4362 x B. 4098	1	0	4	3	8	0	0	2	8	10
D.B. 9/54	B. 46103 x B. 41227	2	1	0	0	3	1	0	1	1	3
D.B. 125/54	P.R. 1000 x B. 41227	3	0	0	0	3	1	1	1	0	3

LEGEND.

A. : Beat Standard Variety.
B. : Beat Standard Variety Significantly.
C. : Beaten by Standard Variety.
D. : Significantly beaten by Standard Variety.
E. : Number of Trials Reaped.

The Demerara-Barbados series have not produced many seedlings which have outyielded B.41227—of the D.B. 1953 and D.B. 1954 series one variety is showing some promise. **D.B.125/54** has performed reasonably well in the trials reaped to date. Again, further reapings have to be carried out before any definite recommendations may be made about D.B. 125/54.

(c) **Demerara Varieties.**

The performance of the Better Demerara varieties is summarized in Table VII.

TABLE VII

Variety.	Parentage	Plants.					Ratoons.				
		A.	B.	C.	D.	E.	A.	B.	C.	D.	E.
D. 26/52	B. 4362 x D. 20/46	7	2	5	1	15	4	1	3	0	3
D. 50/54	Diamond 10 x D. 62/43	1	0	6	1	8	0	0	4	2	6

LEGEND.

A. : Beat Standard Variety.
B. : Beat Standard Variety Significantly.
C. : Beaten by Standard Variety.
D. : Significantly beaten by Standard Variety.
E. : Number of Trials Reaped.

D.26/52 is a variety bred at the Sugar Experiment Station which has performed reasonably well in the trials. It has a juice of consistently high quality and it is recommended that this variety be tried on the sugar estates on a small scale.

(d) **Varieties of Other Countries.**

The performance of the better varieties from other countries is summarized in Table VIII.

TABLE VIII

Variety.	Parentage	Plants.					Ratoons.				
		A.	B.	C.	D.	E.	A.	B.	C.	D.	E.
H. 38–2915		4	1	2	3	10	2	1	5	3	11
H. 44–3098	H. 32–8560 x ?	0	0	3	7	10	0	0	4	9	13
C.P. 44–101	?	4	1	4	2	11	2½	1	4½	3	11

LEGEND.

A. : Beat Standard Variety.
B. : Beat Standard Variety Significantly.
C. : Beaten by Standard Variety.
D. : Significantly beaten by Standard Variety.
E. : Number of Trials Reaped.

Though these are the three better foreign varieties not one of them merits planting on the commercial scale in British Guiana.

In all the series between 1955 and 1957, inclusive, greatest hope of a good commercial variety appears, at this stage, to lie with the Barbados 1957 series. From the results of the one sorting trial reaped several high yielding varieties have been selected. However, since in previous instances high yielding varieties in the sorting trials have not maintained their promise in subsequent trials, too great a reliance cannot be placed on these results at this early stage.

SEEDLING RAISING AND SELECTION.

BY

W. N. L. DAVIES.

New varieties of sugar cane are tested in four distinct groups at the Sugar Experiment Station. These are :—

(i). **Demerara Seedlings.** These seedlings are produced at Sophia from controlled crosses set up at the Station.

(ii). **Demerara-Barbados Seedlings.** These seedlings are germinated from "fuzz" received from the B.W.I. Central Sugar Cane Breeding Station, Barbados.

(iii). **Barbados Seedlings.** The selections made after reaping the first year seedling trial in Barbados are received at Sophia each year.

(iv). **Foreign Varieties.** Good commercial varieties of other countries are received, periodically, from the Plant Quarantine Station, Trinidad.

(a). **Seedling Raising.**

One hundred and five crosses were made at the Station during the 1959 breeding season and 15,572 seedlings were planted in the nursery from the resulting seed. Potting and planting figures for this, the Demerara 1959 series, are recorded in Appendix 1.

Germination of "fuzz" received from Barbados and constituting the Demerara-Barbados 1959 series was good. The planting of seed from a total of two hundred and seven crosses and seventy-eight polycrosses resulted in the germination of 41,006 seedlings. 34,601 seedlings were planted in the nursery as singles and two hundred and forty-five bunches of five seedlings each were planted on an experimental basis. Potting and planting figures are recorded in Appendix 2.

Three hundred and forty-four seedlings of the Barbados 1960 series were imported from Barbados and planted in the nursery. In addition, the following varieties were also received from Barbados during 1960. B.51410, B.51414, B.51415, B.51418, B.52405, B.5660, B.5686 and B.56102.

The following varieties of other countries were distributed from the Plant Quarantine Station, Trinidad :—

H.44-2364, H.45-2708, H.45-2404, H.47-1914, H.47-4991, H.48-4605, H.49-5, Q.66, Q.67, Q.68, Q.70, M.31/45, M.147/49 and E.1/37.

(b). **Selection.**

Selection or elimination from nurseries at the Sugar Experiment Station has, in former years, been carried out on the basis of visual inspection of the plant cane crop. It was desirable to attempt to alter this method of selection for several reasons.

It is well known that the nursery elimination stage is one of the most important stages in the selection of a large population of sugar cane seedlings. It is here that potential commercial varieties may, for various reasons, be lost

forever. This stage, in which a variety is represented by a single stool, is the one to which we have, during the past year, directed a great deal of our efforts.

Ratooning ability is a very important character which one should select for, under British Guiana conditions, since the policy operating on most sugar estates, nowadays, is to retain a field for as many ratoon crops as is economically possible.

Good or bad siting of a stool in a field would probably be more accentuated in the plant cane cycle rather than in the ratoon. In plant cane selection this could result in the elimination of a potential commercial variety simply because it had unfortunately been planted in a bad spot in the field. This is, of course, an exaggerated assumption of what might possibly occur during plant cane selection.

Two slightly different methods of nursery elimination are to be tried from 1960—one method to be applied to the Demerara populations of seedlings and the other to the Demerara-Barbados populations of seedlings.

The method to be applied to the Demerara populations of seedlings will be discussed first.

The seedlings resulting from Demerara crosses are planted in fields which have been divided into blocks, the size of which depends on the number of rows in the field. A number of pre-germinated "one-eye" cuttings of a standard variety are planted at random within each block. In order that the stools of the standard variety, being propagated from a seed piece and not from a seed, differ as little as possible from the sexually propagated seedlings the minimum amount of stem tissue is left adhering to the germinating bud. The progeny of as many crosses as possible are then assigned to each block in the field. In this way the progeny of any one cross, provided that the cross yielded over one hundred seedlings, would not be found in one site only in the nursery. It has been found in the past that fertility gradients are quite often present in fields and the progeny of a cross may all appear to be either good or bad depending on their siting within the nursery. Under the new method of planting the nursery it is hoped that such fertility gradients will be detected by the inclusion of the stools of the standard variety and that any one large cross will not be found in one site in the nursery where the progeny might be affected by such a gradient.

Having planted the nursery it is allowed to grow to the age of eight to ten months when it is cut back without any selection. The freshly cut ends of all the stools are then sprayed with an infusion prepared from material displaying symptoms of leaf scald disease. The nursery, thus treated, is allowed to grow as first ratoons up to the age of eight to ten months during which time periodical inspections are made for the occurrence of symptoms of scald disease.

At this age as first ratoons a wide selection is made when reliable juice figures are obtained and all selected stools are marked with greenheart field pegs, given reference numbers and the canes are weighed and milled. The field is then allowed to grow back as second ratoons to six to eight months when the final selection is made on the basis of performance in both first and second

ratoons. All selected varieties are then extended to as many rows as possible with check rows of a standard variety being included at intervals. A further selection is then made at six to eight months for inclusion in the sorting trials. (1).

Despite the fact that a great deal of time elapses between the planting and the final selection of the nurseries it is felt that this time will be well spent since the dangers of missing potential commercial varieties in the single stool stage are real and well known.

The **Demerara-Barbados** populations of seedlings are planted in the same manner but the method of selection to be applied differs slightly from that of the Demerara material. After planting the seedlings are allowed to grow to the normal reaping age i.e. to about twelve months. This stage is treated as an elimination stage but is also used to collect useful information on juice quality. A wide selection is made as plants and all the canes from the stools of such selected varieties are weighed and milled. In this way it is hoped that data on stool weight and quality of crusher juice may be obtained for all feasible ratoon selections. All selected stools are marked with greenheart field pegs and given reference numbers. All the stools in the nursery, freshly cut, are again sprayed with an infusion prepared from material displaying symptoms of leaf scald disease. The nursery is then allowed to grow back as first ratoons at the age of six months when a ratoon or final selection is made. The presence of leaf scald disease in the population is recorded and a selection is made on the appearance of the stool with reference to the plant cane data on weight and juice quality. All final selections are extended to as many rows as planting material will allow and a further selection is made at six to eight months for the sorting trials. Rows of the standard variety are also grown with these extensions and selection is based on comparisons with this standard variety (2).

THE DEMERARA-BARBADOS 1958 SERIES.

The seedlings of the Demerara-Barbados 1958 Series were planted in the field nursery in March, 1959. The method of planting was that of the old system and included no stools of the standard variety and, further, the progeny of any one cross were planted as they became available for planting. No attempt was made to distribute the progeny of any one cross throughout the nursery.

In March, 1960, the field nursery was burnt when the cane had reached maturity. A wide selection was then made on the basis of appearance in the field. These selections are shown under Plant "Field" Selections in Appendix 3 and amounted to eight hundred and three in number. The stools of these selected varieties were then marked with greenheart field pegs and to each was given a reference number. All the canes from each stool were weighed and then milled and the juice analysed for brix, Pol. % cane and purity. On examination of the weights and juice analyses of these eight hundred and three field selections only two hundred and fifty-three selections satisfied the minimum requirement of a Brix of 18.0 and a stool weight of 40 lbs. — these are tabulated in Appendix 3 under Plant "Final" Selections. The two hundred and fifty-three Plant "Final" Selections represent a selection percentage of 1.07% of the whole population of the nursery. The stools, freshly cut, were then sprayed with an infusion prepared from material displaying symptoms of leaf scald disease.

At 6½ months of age as first ratoons i.e. in October, 1960, the nursery was again subjected to selection. Very few symptoms of leaf scald disease had been seen during the intervening period. However, at this final selection only six stools were observed displaying symptoms of leaf scald disease in the whole nursery. This ratoon selection was based on visual characters alone and reference was made, when possible, to the weight and quality data of the plant cane selections. One hundred and twenty-four selections were made, which constitute the Demerara-Barbados 1958 series, and were extended along with rows of the standard variety for selection for the sorting trials. Of the one hundred and twenty-four final selections, fifty-seven had previously been selected as plants and sixty-seven were entirely new selections. These sixty-seven new selections would therefore represent varieties which, either due to unfortunate siting in the nursery or due to their being poor performers as plants, would have been lost forever had there been only one selection as plants and no selection as ratoons.

All the data on the Selection of the Demerara-Barbados 1958 series is presented in Appendix 3.

(c). **Bunch Planting of Seedlings.**

With the increase in the number of seedlings being planted at the Sugar Experiment Station each year the space available for nurseries is becoming a factor of importance. Most of the planting space at the Station is taken up with varietal trials and the propagation of varieties for distribution to the sugar estates. One method of utilising the same acreage available for nurseries would be to plant seedlings in bunches instead of, or as well as, in single stools as is done in other sugar cane growing countries, notably Hawaii.

However, rather than blindly following the lead of other countries it is desirable, in the first instance, to assess the value of bunch planting as a means of selection under British Guiana conditions. It was with this purpose in view that bunch planting was attempted at the Station during 1960 on a small experimental or observational basis.

The progeny of cross P.42—a polycross attempted at the British West Indies Central Sugar Cane Breeding Station, Barbados in 1959 and having B.37254 as the female parent—were transplanted as both bunches and singles. A total of two hundred and forty-five bunches, each of five seedlings, and two hundred and thirty-two singles were obtained and were planted in rows in the field with single stools of the standard variety B.41227 planted at intervals within the row.

Both the bunches and singles grew well during 1960 and will be subjected to selection during 1961. An assessment of the potential value of selections from bunches as compared with those from singles will be made along the lines of those carried out by Skinner in Australia (3).

References.

1. Evans, H. Private Communication. (1960),

2. Walker, D.I.T. Report on a Visit to British Guiana in March, 1960. (Mimeog.). 1960.

3. Skinner, J.C. "Sugar Cane Selection Experiments. 1. Bunch Planting". Technical Communications. Bureau of Sugar Experiment Stations, Brisbane, Queensland. (1957).

BREEDING.

BY

W. N. L. DAVIES.

For many years sugar cane breeding has been carried out on a small scale at the Sugar Experiment Station, this has resulted in the production of Demerara varieties of sugar cane. During the early years of the Sugar Experiment Station many Demerara varieties were planted as commercial canes in British Guiana and a few of these varieties were also planted in other countries. When, in 1946, British Guiana became a full contributing member of the British West Indies Central Sugar Cane Breeding Station the breeding of new sugar cane varieties in the colony was stopped. However, breeding was continued in 1952 on a small scale, care being taken to avoid, as much as possible, the duplication of crosses made in Barbados.

During the 1960 breeding season greater efforts were directed towards the crossing of the better Demerara varieties with varieties of countries other than Barbados. The following seventy-eight crosses were attempted, the seedlings of which will constitute the Demerara 1960 series.

H.37-1933	x D.37/45; x D.B.125/54; x B.41227; x B.47258.
H.38-2915	x D.37/45; x D.B.125/54.
H.32-1063	x D.37/45; x D.B.125/54; x B.41227; x B.47258.
C.P.44-101	x B.34104; x D.37/45; x B.41227; x D.B.125/54; x B.47258.
M.134/32	x D.37/45; x D.B.125/54; x B.41227; x B.47258.
M.112/34	x D.37/45; x B.41227; x D.B.125/54; x B.37193; x B.47258.
Trojan	x D.37/45; x D.B.125/54; x B.41227; x B.47258.
Eros	x D.37/45; x D.B.125/54; x B.37193; x Co.678; x B.41227.
Ragnar	x D.37/45; x D.B.125/54.
Q.28	x D.37/45; x D.B.125/54.
Co.421	x D.B.125/54; x B.41227; x B.42231.
D.14/34	x Co.678; x Co.991; x Co.775; x H.32-8560; x B.47258.
D.158/41	x D.37/45; x B.34104; x B.47258; x B.41227; x Co.678; x Co.775; x Co.991; x H.32-8560.
D.141/46	x H.32-8560; x Co.678; x Co.775; x Co.991; x Vesta; x B.49119; x B.47258; x B.41227; x D.B.125/54.
D.26/52	x Co. 678; x Co.775; x Co.991; x H.32-8560.
D.219/55	x Co.775; x Co.991; x H.32-8560.
D.62/43	x B.41227; x B.47258; x H.32-8560; x Co.678; x Co.775; x Co.991; x Vesta; x D.B.125/54.
B.37161	x D.184/46.

Flowering was very profuse during 1960 and in the majority of cases no difficulty was experienced in obtaining arrows of the varieties which were desired to be used in the crosses.

The method of crossing used was as follows. A flowering cane of the female parent variety was supported by two stout poles which were placed in the ground at the side and two flowering canes of the male parent were cut and

tied to the poles so that the inflorescences were in contact with each other. The cut ends of the male canes were placed in a container of the standard Hawaiian preservative solution while the female cane was still growing in the ground. This solution was changed every two to three days. The inflorescences were enclosed in a crossing lantern of heavy duty cotton.

Since very favourable results have been achieved from the use of the Hawaiian preservative solution it is proposed to set up a lantern battery for the 1961 breeding season and keep both male and female arrows in this preservative solution.

HEAT-TREATMENT EFFECTS IN RELATION TO THE FLOWERING OF B.37161.

BY

W. N. L. DAVIES.

The heat-treatment of sugar cane cuttings has been practised in the West Indies and British Guiana, at one time or another, to control ratoon stunting disease which was thought to be present in certain territories. It was observed by planters in Barbados (1) that flowering in material which had been subjected to heat-treatment was greatly increased, particularly in the variety B.37161. It was also observed (1) that on heat-treating the varieties in the breeding collection of the British West Indies Central Sugar Cane Breeding Station certain varieties which previously flowered sparsely now flowered more freely—again, B.37161 was one such variety.

In view of this report of increased flowering as a result of subjecting cuttings to a heat-treatment, observations were made on certain sugar estates in British Guiana. Some estates had heat-treated planting material as a precautionary measure against ratoon stunting disease and observations were made in fields propagated from such material. However, no reports were received of any increase in flowering intensity within a variety as a result of heat-treatment.

B.37161 is, in general, a variety which does not flower very profusely under British Guiana conditions. It has been observed that B.37161 very often does not flower during its plant cane cycle and only begins to flower during first and subsequent ratoon cycles.

Since no increase in flowering was observed in the material propagated from heat-treated stock in British Guiana it was decided to import a quantity of this treated B.37161 material from Barbados. (2). This was planted at the Sugar Experiment Station late in September, 1959. In mid-April, 1960 a portion of this material was planted in an observation trial with plots of the British Guiana untreated clonal material. The remainder of the Barbados material was allowed to continue growing in order to observe its flowering intensity during the 1960 flowering season.

Despite the fact that certain other varieties, planted in the same field, flowered profusely during the 1960 flowering season not a single "arrow" appeared in either the heat-treated or the non heat-treated plots of B.37161. The only notable difference between the plots was that the non heat-treated material germinated at least two days before the heat-treated material.

In the case of the remainder of the heat-treated material, which would have been about eleven months old at the beginning of the 1960 flowering season, very little flowering was observed. In fact, out of a total of ten rows each row containing about ten stools only four arrows were observed.

It would appear that in British Guiana the heat-treating of planting material of B.37161 does not alter the "flowering habits" of this variety as far as the plant cane cycle is concerned. These observations will be continued into ratoons to investigate whether flowering is increased in the ratoon cycles.

References.

1. Stevenson, G. C. and Walker, D.I.T. "Heat-Treatment Effects on Two Sugar Cane Varieties in Barbados". I.S.J. Vol. 60, p.p. 251—253. (1958).

2. Evans, H. Private Communication. (1959).

THE VARIETY AND FERTILIZER POSITION OF THE SUGAR INDUSTRY, XXVI.

By

W. N. L. DAVIES, Sugar Agronomist.

1. Commercial Yields, 1960.

The returns submitted by the sugar estates show that the average yield of commercial sugar per acre from all varieties reaped in 1960 was 3.59 tons per acre. Comparative figures of yield of commercial sugar for 1958 and 1959 in British Guiana were 3.73 and 3.37 tons per acre, respectively.

TABLE IX.—**Weighted Average Yields for Major Cane Varieties, 1960.**

Variety	Average Yield 1960 (Tons Sugar Per Acre).						Average Tons Cane per ton Sugar.
	Plants.	1 R.	2 R.	3 R.	4 R.	Old R.	
Pindar	4.85	4.39	3.58	3.48	3.02	3.23	10.86
B. 4362	4.46	4.35	3.78	3.10	3.77	3.29	11.06
B. 4098	4.45	4.17	2.86	3.70	3.33	3.04	11.61
B. 37161	4.28	4.10	3.73	3.51	3.56	3.49	11.03
B. 41227	4.10	3.72	3.61	3.55	3.32	3.27	11.75
B. 47258	4.08	3.60	3.57	3.32	3.28	2.99	11.00
B. 47225	3.71	4.32	3.42	3.42	3.32	3.28	11.08
Colony Average. (All varieties).	4.16	3.78	3.62	3.49	3.42	3.35	11.38

Table IX shows the weighted average yields in terms of tons sugar per acre for the major cane varieties reaped on the sugar estates of British Guiana during 1960. Major cane varieties are here termed all those varieties which occupied more than 1,000 acres in 1960. B.41227 is now the more widely planted variety in the colony as a whole and its close rival is B.37161. However, an examination of Table IX probably leads one to the assumption that B.37161 is a better variety than B.41227—average yields of sugar per acre are higher in nearly all cases, the one exception being in the case of 3rd ratoons. In studying Table IX it should be borne in mind that B.41227 is a better "general purpose" variety than B.37161 and is, therefore, planted more widely. Consequently, in many cases it may well be planted on difficult soil types where it would perform better than B.37161 if that variety had been planted in that particular locality. Broadly speaking, therefore, the average yield of B.41227 is lower than that of B.37161 probably because it is planted on a wider range of soil types than the latter variety. High average yields are recorded by certain other varieties in Table IX because the acreage reaped, in many cycles, is relatively small.

2. Varietal Composition of the 1960 Harvest.

TABLE X.—Acreage and Percentage Distribution of the Varieties Reaped in 1960.

Variety.	English Acres.	Percentage Distribution.				
		In West Demerara.	Along Demerara River Banks.	In East Demerara.	In Berbice.	In Colony.
B. 41227	40,319.2	16.5	19.7	24.4	39.4	42.0
B. 37161	34,670.3	12.9	25.7	10.6	50.8	36.1
B. 47258	6,923.0	18.7	36.6	19.7	25,0	7.2
B. 47225	3,718.0	28.0	16.6	28.9	26.5	3.9
Pindar	2,145.4	9.4	31.5	22.1	37.0	2.2
B. 4362	1,873.4	53.8	10.4	25.3	10.5	2.0
B. 4098	1,189.5	7.0	19.0	7.1	66.9	1.2
B. 45137	666.3	19.6	1.3	38.9	40.2	.7
Co. 419	639.2	1.7	83.0	9.1	6.2	.7
B. 47379	483.6	14.7	14.8	47.2	23.3	.5
D. 37/45	387.2	.9	10.0	83.5	5.6	.4
D. 141/46	323.0	57.7	20.4	5.7	16.2	.3
B. 46378	266.2	5.7	73.4	5.8	15.1	.3
B. 47419	242.7	—	100.0	—	—	.2
B. 49119	177.1	26.3	59.3	1.2	13.2	.2
B. 4373	172.0	4.9	1.4	77.2	16.5	.2
B. 4942	150.0	4.6	95.4		—	.2
Other Varieties	1,595.2	25.2	9.1	11.6	54.1	1.7
Totals ..	95,941.4	16.3	23.6	19.0	41.1	100.0

From Table X it may be seen that the acreage reaped under B.37161 and B.41227 amounted to 78.1 percent of the total acreage. The figures show an increase of 3.1 percent in the acreage of B.41227 reaped in 1960 over the 1959 total. There are notable increases in the acreages of the two Demerara varieties D.37/45 and D.141/46.

Table XI shows the acreages of the varieties constituting the "Other Canes" category in 1960.

TABLE XI.— Acreages of the Varieties Constituting the "Other Canes" Category, 1960.

Variety.	English Acres.	Variety.	English Acres.	Variety.	English Acres.
B. 34104	35	B. 49353	1	H. 37-1933	24
B. 40105	31	B. 50135	11	H. 44-3098	98
B. 42231	5	B. 50267	1	M. 134/32	6
B. 43253	50	B .51116	5	M. 112/34	11
B. 43413	7	B. 51131	1	N.Co. 310	1
B. 46136	5	B. 52107	1	N. Co. 330	31
B. 46218	5	B. 52315	1	P.O.J. 2967	22
B. 4733	1	Comus	3	P.O.J. 3016	3
B. 4744	45	D. 142/41	57	P.R. 1000	2
B. 47179	3	D. 158/41	109	Q. 28	10
B. 48372	46	D. 62/43	86	Q. 47	16
B. 4995	14	Eros	81	Trojan	18
B. 49257	3	G. 176	1	Mixed Varieties	745

3. Acreages under the Various Varieties Scheduled for Reaping in 1961.

Table XII shows the acreages under the various varieties which are scheduled for reaping in 1961. B.41227 occupies the largest acreage and the percentage acreage to be reaped has increased by 3.4% over the 1960 percentage mainly at the expense of B.37161 and B.47258. The percentage acreage under B.4098 and B.4362 continues to decrease.

TABLE XII. —Percentage Distribution of the Varieties to be Reaped in 1961.

Variety.	Total English Acres.	Percentage Distribution.				
		In West Demerara.	Along Demerara River Banks.	In East Demerara.	In Berbice.	Colony.
B. 41227	42,516.00	14.8	21.8	26.4	37.0	45.3
B. 37161	32,918.79	12.6	24.1	10.6	52.7	35.1
B. 47258	6,499.90	20.3	40.5	18.5	20.7	6.9
B. 47225	3,267.14	30.1	17.5	28.4	24.0	3.5
Pindar	1,502.30	12.7	42.0	18.2	27.1	1.6
B. 4362	1,298.93	73.0	13.0	12.1	1.9	1.4
B. 4098	859.40	8.1	19.1	9.8	63.0	.9
B. 45137	668.12	11.7	2.8	45.8	39.7	.7
D. 141/46	573.64	52.4	18.7	11.3	17.6	.6
Co. 419	535.27	2.0	79.7	10.9	7.4	.6
D. 37/45	449.51	—	8.6	86.6	4.8	.5
B. 47379	393.28	18.9	15.4	49.6	16.1	.4
D. 158/41	188.66	—	1.5	—	98.5	.2
B. 47419	164.38	—	100.0	—	—	.2
B. 46378	162.91	7.0	79.9	8.1	5.0	.2
B. 4373	158.39	5.3	1.5	85.2	8.0	.2
B. 4942	152.19	8.7	91.3	—	—	.2
B. 52107	118.34	.5	99.5	—	—	.1
Other Canes	1,349.59	26.0	11.9	16.5	45.6	1.4
Totals	93,776.74	20.0	15.7	40.0	24.3	100.0

4. The Changing Variety Pattern.

The changing variety pattern is shown in Figure I and again B.41227 and B.37161 remain the major varieties.

5. Cycle Age of the Crops.

Table XIII shows that there was a large increase in the percentage under ratoons older than 4th ratoons during 1960 thus illustrating the policy of retaining fields of older ratoons.

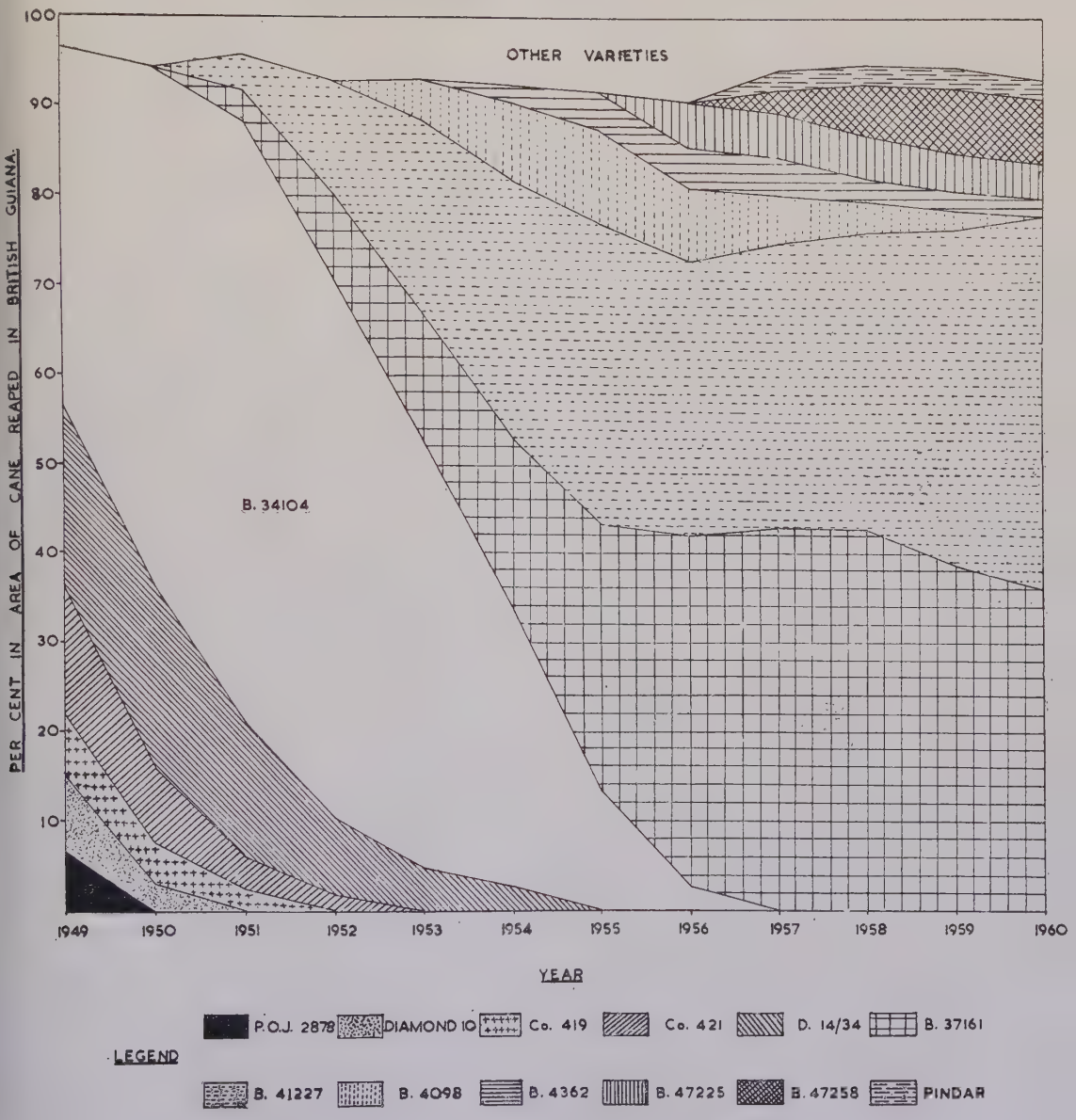
TABLE XIII.—Cycle Age of the Crops.

Category.	Percentage.									
	1952.	1953.	1954.	1955.	1956.	1957.	1958.	1959.	1960.	1961
Plants	27.8	26.1	25.0	26.1	27.9	25.1	19.7	13.4	11.9	12.
1st Ratoons	23.4	23.9	25.1	23.9	24.5	24.8	22.5	18.3	13.0	11.
2nd Ratoons	23.7	22.4	23.0	24.1	23.3	23.7	22.8	21.7	18.0	10.
3rd Ratoons	18.8	18.2	17.8	18.6	17.1	16.5	19.9	20.7	19.4	17.
4th Ratoons	5.4	8.5	7.4	5.0	5.1	7.3	9.6	15.6	17.8	15.
Old Ratoons	.9	.9	1.7	2.3	2.1	2.6	5.5	10.3	19.9	32.
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.

FIGURE 1.

CHANGES IN THE MAJOR CANE VARIETIES

GROWN IN BRITISH GUIANA, 1949 – 1960.



6. Fertilizers.

The quantities of fertilizer applied on the sugar estates during 1958, 1959 and 1960 and the cost of this fertilizer in British Guiana is shown in Table XIV.

There was an increase in the amount of sulphate of ammonia applied during 1960 as compared with the two previous years. Basic slag was applied on a very small scale during 1960.

While there was an increase in the amount of hyperphosphate applied there was also a decrease in the amount of superphosphate applied during 1960.

The quantity of muriate of potash applied during 1960 showed a slight increase as also did the quantity of limestone.

The quantities of Urea and di-ammonium phosphate showed large decreases over the quantities applied during 1958 and 1959.

TABLE XIV

	Ammonium Sulphate.			Superphosphate.			Hyper
	1958.	1959.	1960.	1958.	1959.	1960.	1958.
Quantity — Tons	19,478	19,800	22,561	1,685	1,171	937	1,668
Value — $	1,964,875	1,801,103	1,828,214	274,123	184,690	128,939	128,800
Cost per Ton — $	100.88	90.96	81.03	162.68	157.72	137.61	77.22
% of Total Quantity	50.1	48.4	50.5	4.3	2.9	2.1	4.3
% of Total Value	57.5	56.7	61.3	8.0	5.8	4.3	3.8

and Quantities of Fertilizers used on Sugar Estates, 1958 — 1960.

	Muriate of Potash.			Limestone.			Urea.			Di-ammonium Phosphate.			Basic Slag.		
	1958.	1959.	1960.	1958.	1959.	1960.	1958.	1959.	1960.	1958.	1959.	1960.	1958.	1959.	1960.
.96	2,837	3,541	3,649	11,369	13,085	13,377	1,004	1,022	481	858	737	317	—	—	68
30	297,859	331,977	325,350	281,198	318,954	320,238	236,542	229,132	89,274	234,749	193,831	77,792	—	—	3,702
12	104.99	93.75	89.16	24.73	24.38	23.94	235.60	224.20	185.60	273.60	263.00	245.40	—	—	54.44
.4	7.3	8.6	8.2	29.2	32.0	29.9	2.6	2.5	1.1	2.2	1.8	.7	—	—	.1
.0	8.7	10.5	10.9	8.2	10.1	10.8	6.9	7.2	3.0	6.9	6.1	2.6	—	—	.1

REPORT ON THE SUGAR EXPERIMENT STATIONS FOR THE YEAR 1960.

SUGAR EXPERIMENT STATIONS' COMMITTEE.

The following members formed the British Guiana Sugar Experiment Stations' Committee for the year 1960 :—

The Director of Agriculture	..... *Chairman.*
Mr. R. R. Follett-Smith, C.B.E.	..... *Messrs. Bookers Sugar Estates, Ltd.*
Dr. H. Evans, O.B.E.	..... *Messrs. Bookers Sugar Estates, Ltd.*
Mr. J. Baxter	..... *Messrs. Bookers Sugar Estates, Ltd.*
Mr. A. G. Harley	..... *Messrs. Demerara Co., Ltd.*
Mr. E. S. Douglas	..... *Secretary (to August).*

RESEARCH SUB-COMMITTEE.

The personnel of the British Guiana Sugar Experiment Stations' Research Sub-Committee for 1960 was as follows :—

The Director of Agriculture	*Chairman.*
Dr. H. Evans, O.B.E.	*Messrs. Bookers Sugar Estates, Ltd.*
Mr. A. G. Harley	*Messrs. Demerara Co., Ltd.*
Mr. W. N. L. Davies	*Sugar Agronomist, British Guiana Sugar Producers' Association.*
Dr. H. Paul	*Assistant Director (Research), Department of Agriculture.*
Mr. C. P. Kennard	*Entomologist, Department of Agriculture.*

STAFF OF SUGAR EXPERIMENT STATION.

W. N. L. Davies, B.Sc. (Wales)	*Sugar Agronomist.*
C. Cameron	*Field Manager.*
H. I. Gomes	*Field Assistant.*
R. S. Dookun	*Field Assistant.*
L. A. French	*Field Assistant.*
S. Singh	*Field Assistant.*
K. F. Chung	*Statistical Assistant.*
S. Mangra	*Laboratory Assistant.*
S. Buchanan	*Typist.*

TABLE XV.—Statistics of Seedlings, Cane Distribution, Field Experiments, Cane Samples, Cane Sold and Visits Paid to Estates, 1951 - 1960.

Year.	Seedlings Basketed.	Cane Cuttings Distributed.		Field Experiments.		Cane Samples		Cane Sold to L.B.I. Estate.		No. of Visits to Estates.
		No. of Cuttings.	No. of Bags.	Started.	Harvested.	No. Taken and Analysed.	Cane Crushed (Tons).	Deliveries (Tons).	Net Receipts. $	
1951	—	123,540	2,059	14	71	654	22	3,344.50	24,443.64	89
1952	58*	174,420	2,907	32	62	1,102	30	2,794.50	22,274.61	80
1953	1,133**	104,640	1,744	27	63	1,015	37	3,345.20	31,255.78	88
1954	8,797‡	132,120	2,202	33	80	1,076	31	3,524.49	28,698.86	82
1955	3,149‡‡	139,200	2,320	29	86	1,680	44	3,488.40	28,561.15	83
1956	4,815‡‡	79,620	1,327	29	91	1,903	48	3,078.50	25,908.13	70
1957	17,060‡‡	106,110	1,768	26	103	2,100	55	2,962.65	28,671.62	78
1958	15,316‡‡	97,320	1,622	24	90	2,013	48	3,689.00	29,383.56	62
1959	27,379‡‡	122,880	2,048	32	81	1,438	43	3,581.46	27,679.57	53
1960	62,471‡‡	159,600	2,660	28	78	1,921	56	3,548.41	31,099.92	61

1952 *Demerara Crosses.
1953 **Mauritius "Fuzz".
1954 ‡Barbados "Fuzz".
1955 ‡‡Barbados "Fuzz" (2,982) and Demerara Crosses (167).
1956 ‡‡Barbados "Fuzz" (3,928) and Demerara Crosses (887).
1957 ‡‡Barbados "Fuzz" (15,307) and Demerara Crosses (1,753).
1958 ‡‡Barbados "Fuzz" (13,578) and Demerara Crosses (1,736).
1959 ‡‡Barbados "Fuzz" (24,977) and Demerara Crosses (2,402).
1960 ‡‡Barbados "Fuzz" (41,006) and Demerara Crosses (21,465).

PERSONNEL CHANGES, LEAVE ETC.

Mr. W. N. L. Davies, B.Sc. (Wales) was appointed Sugar Agronomist from January 1st, 1960 in succession to Mr. L. S. Birkett, D.I.C.T.A., A.I.C.T.A.

Mr. E. S. Douglas resigned his post as Secretary to the British Guiana Sugar Experiment Stations' Committee and his duties were taken over by the Sugar Agronomist.

	Annual Leave	Sick Leave
Mr. W. N. L. Davies	23.12.60— 3. 1.61	—
Mr. C. Cameron	—	13.10.60—31.12.60
Mr. H. I. Gomes	13. 6.60—26. 6.60	—
Mr. R. S. Dookun	16. 2.60—22. 2.60 28.11.60— 4.12.60	—
Mr. L. A. French	20. 6.60— 3. 7.60	—
Mr. S. Singh	11. 1.60—18. 1.60 30. 5.60— 6. 6.60	14.3.60—27.3.60
Mr. K. F. Chung	28.11.60—13.12.60	5.9.60—11.9.60
Mr. S. Mangra	4. 1.60—17. 1.60 15.12.60— 3. 1.61	—
Miss S. Buchanan	2. 8.60—15. 8.60	—

EXPERIMENTS

During the course of the year, seventy-five cane variety experiments were reaped. The results of these experiments have been fully reported elsewhere in this Bulletin.

FINANCE

The sum of $80,262.24 was voted from the funds of the Sugar Experiment Stations' Committee for the operation of the Station during the year. The total expenditure in 1960 amounted to $79,477.88.

A credit balance of $11,527.62 remained at the end of 1960. Receipts from assessments for the year amounted to $39,819.50. Receipts from the sale of cane during 1960 amounted to $31,099.92 and miscellaneous receipts to $1,264.82 while a credit balance of $13,858.90 was broughht forward from 1959.

ACKNOWLEDGEMENTS

As in the past close contact was maintained between the Industry and the staff of the Sugar Experiment Station.

The cordial co-operation of the staff of the Sugar Estates and of the Sugar Experiment Station is very gratefully acknowledged. Special mention must be made of the assistance given by the Plant Pathology Division, Department of Agriculture, in the compiling of Leaf Scald disease ratings for the various varieties.

W. N. L. DAVIES,
Sugar Agronomist.

APPENDIX I.

DETAILS OF POTTING AND PLANTING OF SEEDLINGS OF THE DEMERARA 1959 SERIES.

No.	Cross			Potted	Planted	Deaths
1	M. 134/32	x	B. 41227	11	7	4
2		x	B. 37193	3	3	0
3		x	B. 4098	281	247	34
4		x	B. 4362	2	1	1
5		x	B. 34104	7	3	4
6	M. 112/34	x	B. 41227	690	626	64
7		x	B. 4098	126	121	5
8		x	B. 4362	168	150	18
9		x	B. 34104	332	300	32
10	Q. 28	x	B. 41227	85	73	12
11		x	B. 4098	189	161	28
12	Trojan	x	B. 41227	152	147	5
13		x	B. 37193	15	12	3
14		x	B. 4098	154	141	13
15		x	B. 34104	22	20	2
16	Eros	x	B. 41227	96	96	0
17		x	B. 4098	340	294	46
18		x	B. 34104	93	93	0
19	H. 32–1063	x	B. 41227	60	36	24
20		x	B. 37193	111	105	6
21		x	B. 4098	222	193	29
22		x	B. 34104	68	54	14
23	H. 32–8560	x	B. 41227	5	2	3
24		x	B. 4098	0	0	0
25		x	B. 34104	2	2	0
26	H. 37–1933	x	B. 41227	39	34	5
27		x	B. 4362	0	0	0
28		x	B. 4098	130	122	8
29		x	B. 34104	435	429	6
30	B. 37161	x	D. 37/45	183	158	25
31	B. 4362	x	D. 37/45	8	4	4
32	B. 49119	x	D. 37/45	1,491	1,324	167
33	B. 53200	x	D. 37/45	488	469	19
34	B. 45137	x	D. 37/45	89	81	8
35	D. 62/43	x	B. 41227	54	51	3
36		x	B. 47258	902	760	142
37	D. 141/46	x	B. 41227	342	323	19
38		x	B. 4098	79	60	19
39		x	B. 4362	58	49	9
40		x	B. 47258	417	398	19
41	D. 158/41	x	B. 41227	4	3	1
42		x	B. 47258	16	16	0
43	D. 49/46	x	B. 41227	0	0	0
44		x	B. 47258	44	41	3
45	P.R. 1000	x	D. 37/45	939	834	105
46		x	B. 41227	820	719	101
47	P.O.J. 2878	x	D. 37/45	245	241	4
48		x	B. 34104	81	79	2
49		x	B. 41227	383	376	7
50		x	Diamond 10	67	65	2
51		x	B. 47258	607	495	112
52	M. 134/32	x	D. 37/45	22	12	10
53		x	B. 47258	8	4	4
54	H. 32–1063	x	D. 37/45	6	6	0
55	H. 32–8560	x	D. 184/46	3	1	2
56	Pindar	x	D. 37/45	5	2	3
57		x	B. 34104	2	1	1
58		x	B. 41227	29	24	5
59	Ebene 1/37	x	D. 37/45	142	118	24
60		x	B. 34104	9	8	1
61	B. 34104	x	D. 37/45	8	7	1
62		x	D. 94/45	10	9	1
63		x	D. 184/46	3	3	0
64		x	Diamond 10	0	0	0
65	B. 53200	x	D. 184/46	84	74	10
66		x	Diamond 10	145	145	0

APPENDIX I. (Contd).

No.	Cross			Potted	Planted	Deaths
67	Co. 421	x	D. 184/46	1,331	1,268	63
68		x	Co 331	78	78	0
69	D. 283/55	x	B. 34104	0	0	0
70	D. 141/46	x	D. 37/45	235	232	3
71		x	B. 34104	69	67	2
72	B. 49119	x	D. 37/45	0	0	0
73		x	D. 94/45	0	0	0
74	D. 158/41	x	D. 37/45	0	0	0
75		x	Diamond 10	2	2	0
76		x	D. 94/45	0	0	0
77	D. 62/43	x	D. 37/45	508	498	10
78		x	D. 184/46	30	30	0
79		x	B. 34104	57	54	3
80		x	Diamond 10	0	0	0
81		x	D. 94/45	33	32	1
82	D. 14/34	x	D. 37/45	156	144	12
83		x	B. 34104	16	15	1
84		x	B. 41227	689	679	10
85		x	B. 4098	298	270	28
86		x	B 47258	843	745	98
87	B 49119	x	Diamond 10	233	229	4
88	D. 238/55	x	D. 37/45	19	11	8
89		x	B. 41227	43	41	2
90	D. 50/54	x	D. 37/45	15	6	9
91		x	B. 34104	15	12	3
92		x	B. 41227	83	83	0
93	D. 26/52	x	D. 37/45	48	46	2
94		x	B. 34104	0	0	0
95		x	B. 4098	0	0	0
96		x	B. 41227	115	100	15
97	D. 142/41	x	D. 37/45	30	24	6
98		x	B. 34104	37	34	3
99		x	B. 41227	185	170	15
100	B. 43253	x	D. 37/45	67	67	0
101	D. 49/46	x	B. 34104	39	24	15
102		x	D. 37/45	0	0	0
103	Eros	x	B. 47258	36	33	3
104	D. 184/46	x	Self	112	104	3
105	B. 4362	x	D. 94/45	43	42	1
	Totals.			17,096	15,572	1,524

APPENDIX 2.

DETAILS OF POTTING AND PLANTING OF SEEDLINGS OF THE DEMERARA/BARBADOS 1959 SERIES.

No.	Cross.			Potted	Planted	Deaths
1	Co. 421	x	B 54163	298	247	51
2	B. 43283	x	B. 42231	23	18	5
3	B. 45137	x	B. 47151	3	2	1
4	B. 53267	x	B. 42231	97	86	11
5	B. 5650	x	B. 4747	34	17	17
6	Ba. 11569	x	N.Co. 330	6	5	1
8	B. 44132	x	Comus	10	9	1
11	B. 45137	x	B. 49380	38	35	3
12	B. 5012	x	Co. 331	2	2	0
14	Co. 421	x	B. 5411	221	169	52
16	Ba. 11569	x	B. 35276	8	4	4
17	B. 43283	x	B. 45151	868	770	98
19	Otaheite	x	B. 39250	24	21	3
21	B. 43295	x	B. 47320	0	0	0
22	B. 56104	x	B. 45151	166	142	24
23	D. 62/43	x	B. 41227	7	6	1
24	B. 45137	x	B. 51355	58	42	16
25	B. 56104	x	B. 42231	25	21	4
27	B. 4523	x	B. 45121	0	0	0
28	B. 54243	x	Co. 331	0	0	0
29	B. 3365	x	B. 49119	57	49	8
30	B. 45119	x	B. 49119	99	66	33
31	B. 48361	x	B. 4744	7	4	3
32	B. 3365	x	C.P. 44–101	11	8	3
35	Ba. 11569	x	B. 48394	8	6	2
36	B. 43295	x	B. 49119	6	6	0
37	Ba. 11569	x	B. 47184	2	2	0
38	Ba. 11569	x	B. 47157	123	117	6
39	Ba. 11569	x	B. 47198	0	0	0
40	Otaheite	x	B. 47199	156	132	24
41	B. 35247	x	B. 45151	1,923	1,763	160
42	B. 4145	x	B. 50377	58	57	1
43	Trojan	x	B. 49119	60	55	5
44	H. 32–8560	x	Eros	1,613	1,314	299
45	B. 53179	x	B. 49119	23	17	6
46	B. 45198	x	B. 4744	161	142	19
47	B. 45152	x	B. 45151	18	16	2
48	B. 3439	x	Q. 50	159	141	18
49	B. 39254	x	B. 42231	76	69	7
50	B. 3365	x	B. 45151	445	413	32
51	B. 4145	x	B. 4744	52	49	3
52	H. 32–8560	x	B. 4744	244	237	7
53	B. 3439	x	Eros	358	315	43
54	B. 3439	x	B. 50377	306	296	10
56	Co. 421	x	B. 5480	173	166	7
57	B. 3439	x	N.Co. 310	393	341	52
58	B. 4145	x	N.Co. 310	0	0	0
59	B. 43295	x	B. 4098	5	3	2
60	B. 45115	x	B. 49119	0	0	0
61	B. 52315	x	B. 4098	1,131	984	147
62	B. 44111	x	B. 4098	2,556	2,245	311
63	B. 45152	x	B. 4098	277	272	5
64	B. 37226	x	B. 4098	2	2	0
66	B. 53348	x	B. 41211	2,752	2,161	591
67	B. 45152	x	B. 5398	0	0	0
69	Trojan	x	B. 41227	115	96	19
70	B. 37161	x	B. 39220	3	3	0
71	B. 50146	x	B. 50377	25	24	1
72	B. 37161	x	B. 53200	66	59	7
73	D. 62/43	x	N.Co. 310	134	131	3
75	B. 4373	x	B. 45151	168	138	30
77	F. 36—819	x	B. 45151	300	286	14
78	F. 36—819	x	B. 48177	0	0	0
79	Trojan	x	Co. 290	154	141	13
80	B. 45152	x	F. 31–962	0	0	0
81	B. 45152	x	B. 52298	56	52	4
82	B. 51244	x	B. 5398	0	0	0

APPENDIX 2 (Cont'd.).

No.	Cross		Potted	Planted	Deaths
83	B. 53355	x B. 49119	79	79	0
84	B. 5652	x B. 45151	124	109	15
85	B. 5652	x B. 49119	504	474	30
87	Otaheite	x B. 47225	0	0	0
88	B. 5028	x Co. 290	422	410	12
89	H. 32–8560	x B. 52298	158	150	8
90	B. 5012	x B. 4738	46	45	1
91	B. 5028	x Pindar	92	90	2
92	B. 40105	x B. 49119	395	366	29
94	B. 3439	x Pindar	80	68	12
95	M. 134/32	x B. 45116	43	40	3
96	**B. 5651**	x B. 45151	432	343	89
97	B. 37172	x Cl. 41–223	0	0	0
98	B. 45154	x B. 45151	667	576	91
99	B. 4092	x B. 51134	54	48	6
103	B. 44341	x B. 4098	0	0	0
104	**B. 45152**	x Pindar	0	0	0
106	B. 42279	x B. 49119	16	15	1
107	**B. 4214**	**x B. 4098**	12	11	1
109	B. 4092	x No.Co. 310	0	0	0
111	B. 48330	x B. 45151	163	144	19
113	B. 44341	x B. 45109	0	0	0
305	Otaheite	x Co. 678	0	0	0
322	Otaheite	x B. 47331	3	3	0
326	H. 32–8560	x Co. 991	5	5	0
327	B. 46103	x Co. 991	2	1	1
328	Ba. 11569	x B. 58231	0	0	0
329	B. 46103	x B. 58231	0	0	0
330	B. 3365	**x B. 42231**	27	21	6
331	B. 49282	**x B. 42231**	0	0	0
332	H. 32–8560	**x B. 42231**	11	11	0
333	B. 5913	**x B. 42231**	0	0	0
334	B. 42231	x Self	33	12	21
335	**B. 55258**	x B. 39220	2	2	0
337	H. 32–8560	x B. 39220	0	0	0
338	B. 39220	x Self	4	3	1
339	H. 32–8560	x B. 5301	0	0	0
340	B. 5301	x Self	7	7	0
341	B. 45137	x Eros	0	0	0
342	B. 39254	x Eros	0	0	0
343	H. 32–8560	x Eros	86	81	5
344	Eros	x Self	300	220	80
345	**B. 46103**	x B. 43234	0	0	0
346	H. 32–8560	x B. 43234	1	1	0
347	**B. 43234**	x Self	0	0	0
348	B. 3365	x Co. 775	8	7	1
349	**B. 39254**	x B. 4744	0	0	0
351	B. 4744	x Self	35	25	10
352	B. 45152	x B. 49224	0	0	0
353	B. 54243	x B. 49224	0	0	0
354	B. 3439	x B. 45151	33	21	12
355	B. 5012	x B. 45151	22	13	9
356	B. 39254	x B. 42231	0	0	0
357	B. 51311	x B. 42231	0	0	0
358	P.R. 1000	x B. 50377	55	53	2
359	B. 39254	x B. 50377	0	0	0
360	B. 45152	x B. 50377	0	0	0
361	B. 51311	x B. 50377	0	0	0
362	B. 52298	x B. 50377	193	180	13
363	B. 4747	x B. 50377	0	0	0
364	B. 53200	x B. 50377	239	222	17
365	B. 55244	x B. 50377	0	0	0
366	B. 51355	x B. 50377	654	557	97
367	C. 31	**x B. 121**	0	0	0
369	J. 18	**x B. 121**	0	0	0
371	J. 51	**x B. 121**	4	3	1
373	P.R. 1000	x B. 51148	178	169	9
374	B. 51148	x Self	34	23	11
375	B. 39254	x Co. 270	5	3	2
376	B. 51131	x Co. 270	3	2	1
377	B. 45152	x Co. 290	0	0	0

APPENDIX 2 (Cont'd.).

No.	Cross	Potted	Planted	Deaths
378	B. 51311 x Co. 290	29	26	3
379	Trojan x Co. 290	0	0	0
382	B. 51244 x Cl. 41—223	0	0	0
384	B. 4373 x Cl. 41—223	0	0	9
385	B. 50146 x B. 50135	0	0	9
386	P.R. 1000 x B. 50135	0	0	9
387	F. 36–819 x B. 50135	0	0	0
388	B. 50135 x Self	0	0	0
389	B. 48330 x B. 4738	0	0	0
390	H. 32–8560 x B. 4738	25	10	15
391	B. 39254 x B. 4738	0	0	0
392	B. 53348 x B. 4738	0	0	0
393	B. 4906 x N.Co. 310	0	0	0
394	B. 3365 x N.Co. 310	27	22	5
395	B. 4145 x N.Co. 310	0	0	0
396	B. 40105 x N.Co. 310	0	0	0
397	B. 50210 **x Pindar**	102	83	19
398	D. 62/43 **x Pindar**	0	0	0
399	**B. 3365 x Pindar**	0	0	0
400	Trojan **x Pindar**	25	16	9
401	B. 45154 **x Pindar**	0	0	0
403	B. 35247 x B. 45151	1	0	1
404	B. 48165 x B. 45151	0	0	**0**
405	B. 50210 x B. 45151	1	1	0
406	B. 45115 x B. 45151	0	0	0
407	B. 45152 **x C. 4144**	0	0	0
408	P.R. 1000 x C. 4144	215	204	**11**
411	F. 36–819 x B. 4864	0	0	0
412	F. 36–819 x B. 48179	0	0	0
413	B. 45152 **x B. 48179**	0	0	0
414	B. 39254 x Ebene 1/37	0	0	0
415	B. 53348 x Ebene 1/37	0	0	0
416	**Ebene 1/37** x Self	0	0	0
417	**B. 45154 x C.P. 29—116**	0	0	0
418	B. 37161 **x C.P. 29—116**	0	0	0
419	B. 50146 x B. 39220	0	0	0
420	B. 45220 x B. 39220	0	0	0
421	**H. 32—8560** x B. 54142	105	105	0
422	B. 50210 x B. 54142	38	35	3
423	**B 40105** x H. 32–1063	0	0	0
424	B. 48330 x H. 32–1063	0	0	0
425	B. 51311 x B. 49257	0	0	0
426	B. 50146 x B. 49257	0	0	0
427	**B. 49257** x Self	0	0	0
429	B. 45154 x B. 49119	0	0	0
430	B. 44233 x B. 49119	0	0	0
431	B. 53348 x B. 49119	21	**13**	8
432	B. 54142 x Self	2	2	0
433	Trojan x B. 44226	7	5	2
434	B. 50210 x B. 44226	12	12	0
437	B. 5862 **x Self**	4	4	0
438	B. 4381 x B. 5213	0	0	0
439	B. 51311 x B. 5213	0	0	0
441	B. 44341 x B. 57100	0	0	0
442	B.441 x B. 57100	0	0	0
443	B.51243 x N.Co. 310	9	9	0
445	B. 47399 x B. 5862	52	50	2
446	Co. 360 x B. 5862	0	0	0
448	Trojan x B. 44226	56	40	16
449	B. 40105 x B. 44226	0	0	0
450	Ba. 11569 x B. 48394	0	0	0
451	**B. 5041 x B. 45266**	0	0	0
452	B. 45220 x B. 54163	11	11	0
453	F. 36–819 **x B. 51134**	0	0	0
454	B. 45198 **x B. 41276**	0	0	0
456	B. 50146 x B. 41276	0	0	0
457	B. 41276 x Self	0	0	0
458	B. 39254 x B. 45109	20	14	**6**
459	Trojan **x B. 44227**	794	733	61
	Totals.	22,950	19,982	2,968

APPENDIX 2 (Cont'd.).

No.	Female Parent	Potted	Planted	Deaths
P.1	B. 41227	4	4	0
P.2	N.Co. 330	48	42	6
P.3	B. 41227	1	1	0
P.5	B. 49119	0	0	0
P.6	B. 45137	0	0	0
P.7	N.Co. 330	293	241	52
P.8	Co. 991	45	20	25
P.9	Co. 991	15	14	1
P.10	B. 49119	2	1	1
P.11	B. 37161	41	41	0
P.12	Trojan	340	314	26
P.13	Pindar	0	0	0
P.15	Trojan	616	591	25
P.16	B. 4373	34	31	3
P.17	B. 49119	0	0	0
P.18	N.Co. 330	14	12	2
P.20	B. 4373	64	54	10
P.21	N.Co. 330	92	90	2
P.22	B. 4098	0	0	0
P.23	B. 47225	1	1	0
P.24	B. 4098	0	0	0
P.25	B. 47225	0	0	0
P.26	B. 37161	58	58	0
P.27	B. 47225	0	0	0
P.28	B. 50210	605	551	54
P.29	B. 40105	0	0	0
P.30	B. 49203	336	307	29
P.31	B. 49119	144	144	0
P.32	B. 52178	582	540	42
P.33	Eros	1,604	1,240	364
P.34	B. 47184	181	148	33
P.35	B. 45109	554	500	54
P.36	B. 4409	1	1	0
P.37	Tukuyu No. 2	137	125	12
P.38	B. 45266	1,114	720	394
P.39	B. 5121	135	134	1
P.40	B. 47312	222	165	57
P.41	B. 57100	72	63	9
P.42	B. 37254	1,506	1,457	49
P.43	B. 5032	92	88	4
P.44	B. 47380	424	388	36
P.45	B. 5411	243	227	16
P.46	B. 43234	4	2	2
P.47	B. 42231	415	384	31
P.48	B. 45105	14	12	2
P.49	B. 48179	44	32	12
P.50	C.P. 44–155	321	300	21
P.51	B. 35269	4	3	1
P.52	B. 4327	436	405	31
P.53	B. 50382	256	238	18
P.54	F. 31–962	330	291	39
P.55	B. 43346	268	234	34
P.56	B. 4668	337	282	55
P.57	Co. 281	107	107	0
P.58	B. 49224	429	419	10
P.59	B. 50135	525	448	77
P.60	B. 5301	124	116	8
P.61	Trojan	43	35	8
P.62	B. 44226	191	159	32
P.63	B. 43349	0	0	0
P.64	B. 45121	52	34	18
P.65	F. 36–819	6	6	0
P.66	B. 47157	80	75	5
P.67	B. 51311	145	142	3
P.68	B. 4524	441	407	34
P.69	B. 49374	1	1	0
P.70	B. 54243	27	21	6
P.71	B. 49388	66	62	4
P.72	Cl. 41–223	311	298	13
P.73	Co. 413	96	86	10
P.74	B. 51148	2,221	2,047	174
P.75	B. 47183	19	19	0
P.76	B. 49166	3	3	0
P.77	B. 43380	4	4	0
P.78	B. 45119	14	13	1
P.79	B. 51269	1,080	827	253
P.80	B. 5055	22	19	3
P.81	B. 4523	0	0	0
	TOTAL	18,056	15,844	2,212
	GRAND TOTAL	41,006	35,826	5,180

APPENDIX 3.

DETAILS OF THE SELECTION OF THE DEMERARA—BARBADOS 1958 SERIES

Cross		Number in Nursery.	Plant Selection			Number Contracting Leaf Scald.	1st Ratoon Selection		
			Field.	Final.	% Selection.		Reselected in Ratoons	New Selections	% Selection.
Co. 421	x B. 52107	1,955	109	28	1.4	1	10	3	0.66
Co. 421	x B. 47320	1,065	62	23	2.2		2	3	0.47
B. 441	x D. 213	6	0	0	0		0	0	0
B. 45220	x C.P. 36—154	34	2	0	0		0	0	0
B. 45137	x B. 50382	145	4	0	0		0	0	0
B. 37161	x Comus	1	0	0	0		0	0	0
B 51116	x Self	2	0	0	0		0	0	0
B. 5650	x B. 4098	5	0	0	0		0	0	0
P. 17		17	0	0	0		0	0	0
B. 45170	x B. 4744	371	24	5	1.3		0	2	0.54
B. 43283	x B. 4747	1	0	0	0		0	0	0
B. 5012	x B. 46364	2	0	0	0		0	0	0
Ba. 11569	x B 4543	68	1	0	0		0	0	0
P. 19		16	1	0	0		0	0	0
P. 9	x P. 10	52	0	0	0		0	0	0
B. 43283	x D. 251	107	1	0	0		1	1	1.87
P.R. 1000	x B.H. 10/12	12	0	0	0		0	0	0
B. 37161	x Co. 270	17	2	0	0		0	0	0
Trojan	x B. 49119	77	7	1	1.3		1	1	2.60
B. 45137	x B. 5121	59	7	2	3.4		0	0	0
B. 3439	x C.P. 36–154	112	9	1	0.9		0	0	0
Trojan	x B. 51152	40	2	0	0		0	0	0
B. 5041	x B. 54142	49	2	0	0		0	0	0
B. 3439	x B. 4744	12	1	0	0		0	0	0
P. 13		56	2	0	0		0	0	0
P. 29		1,048	82	25	2.4		6	7	1.24
D. 62/43	x B. 49119	39	2	0	0	1	0	3	7.69
B. 52371	x D. 251	263	27	4	1.5		2	4	2.28
B. 42231	x Self	19	1	0	0		0	0	0
Trojan	x B. 46364	117	5	3	2.6		3	0	2.56
F. 36–819	x B. 47314	15	1	1	6.7		0	0	0
Otaheite	x B. 47156	99	3	0	0		0	0	0
B. 4373	x Pindar	3	0	0	0		0	0	0
B. 52371	x U. 1122	29	0	0	0		0	0	0
B. 52222	x B. 43229	5	0	0	0		0	0	0
B. 43280	x B. 49119	53	1	0	0		0	0	0
F. 36–819	x B. 4362	4	0	0	0		0	0	0
P. 23		11	0	0	0		0	0	0
B. 45137	x B. 48392	609	35	13	2.1		3	4	1.15
H. 32–8560	x B. 45109	12	0	0	0		0	1	0.83
B. 50210	x B. 49119	465	26	9	1.9		1	0	0.22
H. 32–8560	x B. 43375	2	0	0	0		0	0	0
F. 36–819	x B. 5480	3	1	0	0		0	0	0
B. 35207	x N.Co. 330	6	0	0	0		0	0	0
B. 50210	x B. 46364	384	26	3	0.8		1	0	0.26
B. 35207	x D. 251	30	0	0	0		0	0	0
P. 15		3	0	0	0		0	0	0
B. 40272	x B. 5480	16	1	0	0		0	0	0
Ba. 11569	x C. 343	198	2	0	0		0	0	0
B. 51129	x B. 45151	6	1	0	0		1	0	16.67
Co. 421	x D. 2452	757	22	6	0.8	1	1	0	0.13
B. 52371	x B. 34104	28	0	0	0		0	0	0
Ba. 11569	x B. 35276	19	0	0	0		0	0	0
M. 134/32	x B. 47314	9	0	0	0		0	1	11.11
B. 37161	x Pindar	1	1	0	0		0	0	0
B. 4092	x B. 51242	2	0	0	0		0	0	0
B. 35207	x B. 52107	816	39	3	0.4		1	3	0.49
P.R. 1000	x B. 47258	1,258	64	23	1.8		3	2	0.40
B. 52222	x Co 270	10	0	0	0		0	0	0
F. 36–819	x B. 4098	25	1	1	4.0		1	0	4.00
B. 50210	x B. 47258	702	30	6	0.9		1	2	0.43
B. 35207	x D. 251	26	0	0	0		0	0	0
B. 45152	x Co. 270	59	0	0	0		0	0	0
B. 37161	x D. 2451	14	1	0	0		0	0	0
P. 21		15	2	0	0		1	0	0.67
B 4373	x B. 42231	14	0	0	0		0	0	0
B. 5336	x B. 4098	379	13	1	0.3		0	3	0.79
B. 52321	x B. 43375	250	9	2	0.8	2	1	1	0.80
P. 28		209	8	2	1.0		1	1	0.96
B 51167	x B. 45151	74	3	3	4.1		0	1	1.35
B. 52389	x B. 52107	298	9	6	2.0		0	0	0
F. 36–819	x B. 42231	2	0	0	0		0	0	0
Ba. 11569	x B. 52107	51	3	0	0		0	1	1.96
Co. 421	x B. 45151	1,071	37	15	1.4		4	0	0.37
B. 37161	x B. 51242	30	2	1	3.3		0	0	0

APPENDIX 3 (Cont'd.)

Cross		Number in Nursery	Plant Selection.			Number Contracting Leaf Scald	1st Ratoon Selection.		
			Field.	Final.	% Selection		Reselected in Ratoons	New Selections	% Selection
B. 47329	x B. 4022	1	0	0	0		0	0	0
B. 39157	x B. 4744	1	0	0	0		0	0	0
H. 32–8560	x N.Co 330	2	0	0	0		0	0	0
B. 37161	x B. 41211	94	2	0	0		0	0	0
Co. 421	x D. 251	1,011	7	2	0.2		0	0	0
B. 45137	x B. 41227	1,047	34	20	1.9		0	4	0.38
B. 45225	x B. 4744	1,716	19	13	0.8		6	9	0.87
B 45121	x B. 45151	1,415	18	9	0.6		1	3	0.28
B. 3439	x H. 37–1933	34	0	0	0		0	0	0
B. 5041	x B. 49119	281	1	1	0.4		1	1	0.71
B. 45121	x B. 4744	39	3	1	2.6		1	0	2.56
B. 37161	x Co. 413	20	0	0	0		0	0	0
B. 34102	x B. 4744	224	0	0	0		0	0	0
B. 40272	x B. 4744	21	0	0	0		0	0	0
B. 37161	x Eros	527	1	1	0.2		0	1	0.19
Otaheite	x B. 51152	66	0	0	0		0	0	0
B. 55258	x Eros	2	0	0	0		0	0	0
B. 48306	x B 37193	136	0	0	0		0	0	0
Co. 421	x B. 4098	119	2	2	1.7		0	0	0
Co. 421	x B. 46265	935	8	5	0.5		1	3	0.43
H. 32–8560	x Pindar	159	0	0	0		0	0	0
B. 4862	x Badilla	4	0	0	0		0	0	0
B 5041	x B. 4738	5	0	0	0		0	0	0
B. 51243	x Self	2	0	0	0		0	0	0
B. 37161	x B. 4098	181	1	1	0.6		0	1	0.55
B. 47386	x B. 4098	902	5	5	0.6		0	1	0.11
Trojan	x 32 M.Q. 629	1	0	0	0		0	0	0
B. 48306	x B. 4098	383	3	2	0.5		0	0	0
B. 37172	x Pindar	42	0	0	0		0	0	0
B. 4214	x B. 49119	126	3	3	2.4	1	2	0	1.59
Ba. 11569	x R. 3321	43	1	1	2.3		0	0	0
B. 4096	x B. 41227	94	0	0	0		0	0	0
B. 4455	x B. 4098	20	0	0	0		0	0	0
B. 49282	x B. 4098	18	0	0	0		0	0	0
R. 334	x U. 112	14	0	0	0		0	0	0
TOTAL		23,524	803	253	1.07	6	57	67	0.53